DRAFT MITIGATED NEGATIVE DECLARATION
AND
INITIAL STUDY

Prepared for

Bobcat Flat West Salmon Habitat Restoration
Phase II, River Mile 43± Tuolumne River,
Stanislaus County, CA

prepared by:

The State of California
Department of Fish and Game
Central Region
1234 E. Shaw Avenue
Fresno, California 93710

July 2010

Table of Contents

Draft Mitigated Negative Declaration

PROJECT TITLE:	Bobcat Flat West Phase II Restoration Project
PROJECT LOCATION:	Along the Tuolumne River in unincorporated eastern Stanislaus County, California, approximately five river miles west of the community of La Grange and 27+ miles east of Modesto, California.
PROJECT PROPONENT	Friends of the Tuolumne, Inc.
LEAD AGENCY:	California Department of Fish and Game, Central Region, Fresno, California
SCH NUMBER:	

BRIEF PROJECT DESCRIPTION: Project activities include extracting cobbles and coarse gravels, coarse sediment introduction, and slough and riparian restoration along the north bank of the Tuolumne River between river miles 42.5 to 43.5. The project footprint on the north bank includes about 11 acres where approximately 36,500 yd^3 will be excavated from the degraded floodplain at five existing borrow sites. Two areas totaling 1.8 acres will be used to store screened, sorted, and cleaned cobble and gravel. Within this reach up to 16,000 yd^3 of cobbles and coarse gravels would be introduced into 9-14 "patches" within the river channel, which will help to restore a natural pool-riffle morphology. At the downstream end of the project area, work will be done to reconnect and improve habitat conditions in a remnant dredger swale (i.e. Duck Slough); this will require the excavation of 4,500 yd^3 to reconnect the slough and to partially fill Duck Slough with 2500± yd^3 to create a shallower side channel. The remaining material will be used to fill in two remnant off-channel mining pits, which will help prevent potential stranding and adverse conditions for salmonids during moderate flow events. The project aims to restore and enhance spawning and rearing habitat for Chinook salmon and steelhead, and to benefit other biota that depend on riverine, riparian, and floodplain habitats.

Pursuant to CEQA, a Lead CEQA Agency must prepare an Initial Study (IS) for the Proposed Project to determine if any significant adverse effects on the environment would result from project implementation. The attached Initial Study (IS) utilizes the significance criteria outlined in Appendix G of the CEQA Guidelines. If the IS prepared for the project indicates that a significant adverse impact could occur, CDFG would be required to prepare an Environmental Impact Report (EIR).

According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA Guidelines, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

> (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
>
> (b) The initial study identifies potentially significant effects, but:
>
> > 1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

This document was prepared by the California Department of Fish and Game Central Region staff utilizing information gathered from a number of sources including research and field review of the proposed project area and consultation with experts on staff at other public agencies. Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Fish and Game has independently reviewed and analyzed the Initial Study/Draft Mitigated Negative Declaration and finds that this document reflects its independent judgment. The lead agency further finds that the proposed project, which includes revised activities and mitigation measures designed to minimize environmental impacts, would not result in significant adverse effects on the environment and therefore preparation of an EIR is not required. The mitigation measures identified in the IS are designed to reduce or eliminate any potentially significant environmental impacts from the proposed project. Mitigation measures are structured in accordance with the criteria in Section 15370 of the CEQA Guidelines.

NEGATIVE DECLARATION: Based on the evaluation conducted of potential significant impacts of the proposed project, it has been determined that with implementation of the mitigation measures identified in the IS, the proposed project would not have a significant adverse impact on the environment. Therefore, adoption of a Mitigated Negative Declaration (MND) will satisfy the requirements of CEQA.

Signed: _____ Date: _____

Name: Jeffrey R. Single, Ph.D. Title: Regional Manager

INITIAL STUDY
Bobcat Flat West Restoration – Phase II, River Mile 43±
Tuolumne River, Stanislaus County, CA

Date: July 15, 2010

Assessor's Parcel Nos. 008-020-023, and a portion (0.8± acre) of 008-020-016 encompassing the area from the centerline of the river adjoining 8-020-023 and extending to the south shore of the river to allow for instream work over the river width. Phase II work is not proposed on parcels 008-021-011 and 008-021-026 (Bobcat East) which also are owned by Friends of the Tuolumne, Inc. and are part of what is referred to as the overall Bobcat Flat area.

Surface/Mineral Rights Owner:
Friends of the Tuolumne, Inc.
Dave Boucher anadromous@bendbroadband.com
Allison Boucher aboucher@bendbroadband.com
1900 Northeast 3rd, Ste.106-314
Bend, OR 97701
(541) 306-6887

Joel Hall (8-020-16, portion)
24306 Lake Road
La Grange, CA 95329

Applicants: Friends of the Tuolumne, Inc.

Lead Agency Contacts:
CEQA
California Department of Fish and Game
Attention: Julie Vance
California Department of Fish and Game
Central Region
1234 East Shaw Avenue
Fresno, California 93210
(559) 243-4005, extension 141
jvance@dfg.ca.gov

1.0 INTRODUCTION

An Initial Study (IS) is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare … a proposed negative declaration or mitigated negative declaration … when: (a) The Initial Study shows that there is no substantial evidence … that the project may have a significant impact upon the environment, or (b) the Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the proposed project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). This IS/ draft Mitigated Negative Declaration (MND) conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

The Bobcat Flat West Phase II Project is proposed to restore, increase, and enhance the quantity and quality of salmonid [Central Valley fall run Chinook salmon (*Oncorhynchus tshawytscha*) and Central Valley steelhead (*Oncorhynchus mykiss*)] spawning and rearing habitat and improve habitat for waterfowl and other aquatic and terrestrial species between River Mile 42.5± and 43.5± within and adjacent to the Tuolumne River in Stanislaus County by 1) reestablishing natural floodplain processes through channel contouring and connections; 2) replenishing spawning gravel through augmentation; and 3) bank re-vegetation and riparian habitat preservation activities which will promote both the wetland and upland the native plant communities. The purpose of this study is to address specific impacts that may result from implementing the proposed habitat restoration project.

Pursuant to Fish and Game Code Sections 1600 et seq., the California Department of Fish and Game (CDFG) has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. Given the Bobcat Flat Restoration Project would use material from the Tuolumne River and re-deposit the material back into the channel, this Project would require a Lake and/or Streambed Alteration Agreement (LSAA) consistent with Section 1602 of the Fish and Game Code. The issuance of an LSAA by the CDFG is considered a "project" (CEQA Guidelines Section15378) and is therefore, subject to CEQA. Typically, the CDFG relies on the Lead Agency's CEQA compliance to make our own findings. In this instance, a previous CEQA document in the form of a Negative Declaration was developed for Phase I of the Bobcat Flat Restoration Project. While the Negative Declaration was circulated and certified by a Lead Agency (see Appendix E Notice of Determination SCH No. 2005022101) it does not fully describes the potential Project-related impacts to stream and riparian resources; to aquatic and terrestrial species; and the appropriate measures to avoid, minimize, and mitigate impacts to these resources for this second phase of the Bobcat Flat Restoration Project. As a Responsible Agency under CEQA, the CDFG is required to comply with CEQA in the issuance of a Stream Alteration Agreement. Therefore, CDFG is acting as Lead CEQA Agency for this phase of the Bobcat Flat Restoration Project. This IS / draft MND has been prepared by the CDFG to identify and assess the anticipated environmental impacts and to satisfy the State CEQA Guidelines regarding the United States Fish and Wildlife Service (USFWS) Anadromous Fish Restoration Program (AFRP) funding to the Friends of the Tuolumne (a non-profit organization) to implement the CDFG's proposed Bobcat Flat Restoration Project located on the Tuolumne River at River mile 43 and the flood plain of Bobcat Flat west .

This IS / draft MND is an informational document used in the local planning and decision-making process. The project involves enhancing spawning and rearing salmonid habitat in the Tuolumne River that will incoporate avoidance and revegetation measures for riparian vegetation removal and will identify

measures to eliminate any potential to impact any California Endangered Species Act (CESA) and/or Federal Endangered Species Act (FESA) listed species which may potentially be occupying the site, as well as impacts to any species of special concern. The IS / draft MND is not intended to recommend approval or denial of the project and the purposes of this IS/draft MND are:

- To provide the lead agency with information to use in deciding whether to prepare an Environmental Impact Report (EIR) or a negative declaration;
- To enable the lead agency to modify the project to mitigate adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a negative declaration; and,
- To document the factual basis for the finding in a mitigated negative declaration that a project will not have a significant effect on the environment.

The beginning and ending dates of the 30-day public review period will be indicated on the Notice of Completion. All views and comments on how the proposed project may affect the environment are welcomed. Anyone wishing to submit written comments for CDFG's consideration must be postmarked on or prior to the date the public review period will close as indicated on the Notice of Completion. Written comments can be submitted via email and such comments must be received on or prior to the date the public review period closes, as listed on the Notice of Intent.
Comments should be addressed to:

Julie Vance, Environmental Program Manager
California Department of Fish and Game
Central Region
Conservation Planning and Lands Management
1234 E. Shaw Avenue
Fresno, CA 93710
Phone: (559) 243-4014 Ext. 141
Fax: (559) 243- 4020
Email: jvance@dfg.ca.gov

After comments are received from the public and reviewing agencies, the CDFG will consider those comments and may (1) adopt the Mitigated Negative Declaration and approve the proposed project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved and funded, the CDFG could design all or part of the project.

Adoption of the proposed IS would not require implementation of the project.

2.0 LOCATION

Bobcat West Phase II project site is located along the Tuolumne River in unincorporated eastern Stanislaus County, California, approximately five river miles west of the community of La Grange and 27+ miles east of Modesto, California and encompasses approximately 144.5 acres of the 334.89± Bobcat Flat property. The project site is shown on the U.S.G.S. Cooperstown 7.5' Quadrangle Map in a portion of Sections 32 and 33, of Township 3 South and Range 13 East and occupies all or some portions of Stanislaus County Assessor's Parcel Numbers 008-020-023 (encompassing the area north from the centerline of the river) and a portion of 008-020-016 (0.8 acres from the centerline of the river) which adjoins 008-020-23 to extend to the south shore of the river allowing for in-stream work over the width of the river.

The Phase II work area will be within the reach of river miles 42.5 to 43.5. Project activities include extracting cobbles and coarse gravels, coarse sediment introduction, slough and riparian restoration along the north bank of the Tuolumne River. The project footprint located on the north bank includes about 11+ acres where approximately 36,500± yd^3 will be excavated from the degraded floodplain at five existing borrow sites and two areas totaling 1.8 acres will be used to store screened, sorted, and cleaned cobble and gravel. Within this reach up to 16,000 cubic yards of cobbles and coarse gravels would be introduced into nine - fourteen "patches" helping to restore a natural pool-riffle morphology in the river channel. At the downstream end of the work area, work will be done to reconnect and improve habitat conditions in a remnant dredger swale (i.e. Duck Slough) and fill-in two remnant off-channel mining pits. This work includes the excavation of 4,500 yd^3 to reconnect the slough and partially fill Duck Slough with 2500± yd^3 to create a shallower side channel and the remaining material filling in the two mining pits to address potential stranding and adverse conditions for salmonids during moderate flow events.

3.0 PROJECT AND SETTING

A detailed description of project conditions, mitigation measures and project design features which minimize and/or avoid potential project effects is included in **Appendix A**. Overall, the project will consist of:

- Extract 48,500± cubic yards (36,500± yd^3 of gravels plus 12,000± yd^3 of cobbles and coarse gravels (i.e., coarse sediments) stockpiled during a previously executed restoration project within Bobcat Flat (completed in 2006 and commonly referred to as Bobcat Flat Restoration Phase I) upstream and adjacent to the proposed Project location. This will be accomplished by excavating about 10.3± acres of the river floodplain (in approximately five borrow areas) on the western half of the project site, which has already been disturbed by gold dredger activities and previously scraped dredge tailings from Phase I. Sediments will be temporarily stockpiled, screened, sorted, and cleaned (i.e., wet-washed or dry screened). Two stockpile areas, totaling 1.8+ acres, will be located on the northwest portion of the project site adjacent to an existing ranch road. Stockpile and processing areas shall be located at least 500± feet from the active river channel. All coarse sediment materials will be excavated from the project site for use on the project site. No excavated materials will be transported or sold off the project site.

- Wash water for gravels shall be pumped from the river using a NMFS-approved screen fitted at the end of the pump hose to block entry by juvenile fish. Large rock will cover the hose/filter to reduce velocity and avoid injury to juvenile fish. Alternatively, water may be pumped from existing on-site ponds using the same NMFS approved screening and velocity reduction methods. Runoff from gravel-washing shall be contained within a separate sediment basin and be allowed to percolate into the ground below the sediment basin. Initially gravels will be cleaned using both wet-washing and dry-screening techniques to compare effectiveness. The more effective of the two options will be implemented for the majority of the project. It is anticipated that some water will be pumped from the river or on-site ponds even with the use of dry-screening to implement dust-control measures (e.g., dry screening will employ a mist screen above/through the dust when heavy dust is generated by the screen plant).

- Introduce up to16,000± cubic yards of cobbles and coarse gravels between 8+ millimeters and 130+ millimeters in size (produced from the preceding extraction activity), into nine to fourteen “patches” helping to restore a natural pool-riffle morphology in the river channel. In addition, deposit oversized rock in the bottoms of deep fills mimicking the natural size sorting strata of stream channels.

- Enhance Duck Slough through excavation (4,500± yd^3) at the downstream end to provide a connection to the main stem Tuolumne River and the placement of unsorted gravels (2,500± yd^3) creating an alternating bar sequence through the slough to improve duck habitat, reduce predatory fish (bass) habitat, provide winter rearing habitat for fry and juvenile salmonids, reduce mosquito habitat, reduce stranding threats to salmonids and increase foraging opportunities for out migrating salmonids during spring dam releases (see Figure 4).

- Fill two off-channel mining/dredger pits with sediments primarily from excavating Borrow Area 5 (See **Figure 4**) to help redirect floodplain flow back into the main channel. The two pits will be rehabilitated using unsorted coarse sediment from the floodplain borrow areas leaving at least half the width of channels/pits as open water and creating benches around the margins where feasible (equipment limitations may limit bench construction to only portions of each pit). Benches will be less than 3± feet deep (to accommodate cattail establishment) for a width of at least 10± feet wide and taper down to the depth of the pits. The width of the benches will be dependent on the width of the pit in that area and the goal of leaving at least half of the pit as open water. Re-contouring the existing floodplain with a new high flow channel to restore its natural floodplain function. Channel re-sizing and re-contouring is anticipated in conjunction with these activities as is partially filling remnant dredger channels and instream gravel pits to reduce predatory species habitat.

- Partially fill remnant dredger channels and instream mining pits to reduce predatory species habitat (See **Figure 4**).

- Re-contour the existing floodplain with a new high flow channel (primarily through excavations of Borrow Areas 1-5 and re-contouring) to restore its natural floodplain function. Channel re-sizing and re-contouring is anticipated in conjunction with these activities. Under this Phase II project, overall floodplain area will be increased by 10.9± acres. Consistent with the Tuolumne River, Bobcat Flat Conceptual Restoration Plan (Friends of the Tuolumne 2003); the final floodplain design will handle flows of up to 15,000± cfs (La Grange Dam releases in 2006 peaked at 9,020 cfs). In contrast, riffles and pools are designed for spawning flows of 150–300 cfs. At flood-level flows of 1000-1500± cubic feet per second (cfs), inundation from the main river channel will encroach onto the lower benches of the newly lowered floodplain in the vicinity of patches 10-14. As river flow increases, more of the bench area will submerge (i.e., retrograde inundation from the river onto the newly lowered floodplain). At 3500-4000 cfs or above, the higher elevations of the new floodplain will enter the high-flow bypass channel constructed in 2005. Above 3500-4000 cfs flows, waters will flow from the 2005 channel into the newly constructed channel over a gentle gradient.

- The spawning gravels (i.e., coarse sediments) of the nine to fourteen "patches" will be augmented as necessary when transported by high flows outside of the project reach over the five year life of the project to maintain spawning and rearing habitat. It is anticipated that approximately 20,000 to 60,000 tons of coarse sediment will need to be replaced in the foreseeable future. In addition to addressing impacts associated with the initial project; this environmental document also is intended to address potential impacts associated with coarse sediment replacement activities in the foreseeable future following initial coarse sediment introduction as long as the same activities and same locations identified in the current project description are unchanged.

- Revegetate the site/Tree Preservation. **Appendix B** provides a detailed description of the vegetation rehabilitation plan. Fines segregated from the gravel during screening will be placed in the excavated areas to improve substrate for planting and recruitment. Revegetation will include:

Tree Species to be Mitigated if Removed	Tree protection measures for Trees to be Retained/a/	Tree size requiring mitigation	Replanting Requirement/b/, /c/
Fremont cottonwood *Populus fremontii*	Protection buffers will be 30-ft (9.1-m) from the outer edge of the dripline	Per **Appendix B**	Per **Appendix B**
Willows *Salix* spp.	Protection buffers 10-ft (3-m) from the outer edge of the dripline		
Poplar, alder, ash, other			
Oaks *Quercus* spp.	Protection buffers 10-ft (3-m) from the outer edge of the dripline	3 in, or greater dbh. (inventory shall distinguish between trees 3"or greater and those over 5")	3-5" dbh – same species 3:1 >5" dbh – same species 5:1 Planted in excavated areas and/or on-site oak tree planting area (See **Appendix B**)

(a) Protection buffers as established above shall be established by installing brightly colored temporary safety fencing and/ or installing brightly-colored flagged stakes prior to any site disturbances within areas proposed for site disturbance and as allowed by the dense cobble surface and topography.

(b) Oaks should be planted during the winter dormancy period in the nearest suitable location to the area where they were removed Riparian trees (i.e., willow, cottonwood, poplar, alder, ash, etc.) and shrubs planted in the nearest suitable location to the area where they were removed. Alternative planting times are permissible; however, irrigation is required for tree planting outside of the rainy season.

(c) Replanted trees shall achieve a 70% survival rate for at least three years from installation (see project conditions for monitoring provisions)

As referenced above in the Project Location description, the entire Bobcat Flat property is comprised of four parcels totaling 334.89± acres along the Tuolumne River. All parcels are zoned A-2-40 (General Agriculture) under the Stanislaus County Zoning Code with a General Plan land use designation of Agriculture. Currently, the 334.89 (335)± acre Bobcat Flat site is consists of two discrete restoration project phases:

- River Mile 43 Phase I (completed)
- Bobcat West Phase II (proposed project)

The proposed project site is approximately 144.5 ± acres in size with an expected total disturbance area of 11.8 ± acres of in-channel work within the reach of river miles 42.5 to 43.5, in Duck Slough, and on the floodplain to the north (i.e., Bobcat West). All stream channel topography, soil tests, biological and archaeological studies have been completed and establish baseline data for the entire 335± acre Bobcat Flat site. Potential future restoration projects (i.e., River Mile 44 and Bobcat East), including project design, are contingent upon securing additional funding. Therefore, project-level analyses of any future potential restoration projects are infeasible at this time. The evaluation of impacts within this Initial Study is restricted to potential impacts of the Bobcat West (Phase II) restoration project located at River Mile 43. The proposed project is expected to begin in the summer of 2010.

The current project is funded by the United States Fish and Wildlife Service (USFWS) Anadromous Fish Restoration Program (AFRP) to Friends of the Tuolumne, Inc., a non-profit organization, to implement the project. Additional funding may be secured prior to commencing work in summer, 2010; therefore, this document addresses potential environmental impacts of several potential Phase II projects within the Bobcat Flat RM 43 (i.e., all or a part of the project described herein will be completed subject to available funding).

4.0 INCORPORATION BY REFERENCE

The following documents were prepared for this project and are hereby incorporated by reference:

- Moore Biological Consultants, Diane Moore. March 11, 2010. "Baseline Biological Resources Assessment: Bobcat Flat River Mile (RM) 43 Phase II Restoration Project, Stanislaus County, California"; March 11, 2010. (**Appendix C**)

- McBain and Trush. April 6, 2010. "Bobcat Flat RM 43 Phase II Restoration; 30% Design Document; Technical Memorandum" [Hereinafter, McBain & Trush, 2009] (**Appendix D**)

- "Notice of Determination; Bobcat Flat Coarse Sediment Introduction and Riparian Restoration Project"; State Clearinghouse Number: 2005022101; Filed April 19, 2005 – Stanislaus County Clerk (**Appendix E**)

- Davis-King & Associates, September, 2004. "Historic Properties Survey Report of the Proposed Bobcat Flat (River Mile 43) Coarse Sediment Introduction Project, Tuolumne River near La Grange, Stanislaus County, California" [Hereinafter, Davis-King, 2004]*

- Point Reyes Bird Observatory (Jeanne Hammond, Roy Churchwell, and Geoffrey Geupel), 2001. "Songbird Monitoring on Grayson River Ranch and Bobcat Flat"[Hereinafter, Point Reyes, 2001]*

*Copies of these documents are available for review during regular business hours at:

- California Department of Fish and Game, Central Region
  1234 E. Shaw Avenue
  Fresno, CA 93710

- Online at the Tuolumne River Technical Advisory Committee (TRTAC) website:
  http://www.tuolumnerivertac.com/

5.0 PURPOSE AND NEED

The project site has been severely damaged and the fish and wildlife habitat left significantly altered for many years. This reach of the Tuolumne River was altered by gold dredging activities done to excavate the original river channel and flood plain up to 25 feet deep during the first half of the last century. This reach of the river was further altered during the 1960s by harvesting gravels during construction of upstream dams and by upstream dam construction (especially the New Don Pedro Dam in 1971) that has changed the flow regime of the river and reduced coarse gravel recruitment in this reach of the river. These river altering activities converted this reach of the Tuolumne River channel from a natural river pool-riffle sequence, which had provided spawning and rearing habitat for Chinook salmon and steelhead, to a lake-cascade stream morphology, with steep gravel gradients and long pools in between gravel bars, and with swift water unsuited to spawning and rearing habitat for salmon and steelhead. The Tuolumne

River historically served as spawning and rearing habitat for large populations of Chinook salmon and steelhead. The Chinook salmon and steelhead populations have declined significantly over the past several decades throughout their range. Central Valley Steelhead are listed as Threatened pursuant to the Federal Endangered Species Act (FESA). Fall-run Chinook salmon are also California Species of Special Concern.

The proposed restoration and enhancement of spawning and rearing habitat in the Tuolumne River for these fish species is needed for their continued survival and recovery from the current threat of decline and ultimate extinction. Since the construction of upstream dams created a barrier to prevent the Chinook salmon and steelhead from migrating upstream of the dams for spawning above La Grange, there is no feasible alternative to the reconstruction and enhancement of spawning and rearing habitat within the main channel of the Tuolumne River. This reach of the river has not been able to recover natural channel and floodplain features and habitats. If the project is not constructed with mechanical intervention, the Chinook salmon and the steelhead will likely continue to loose population numbers. The proposed restoration and enhancement of salmonid habitat will also benefit other aquatic and terrestrial animals in and around the Tuolumne River. The proposed reconstruction and enhancement of spawning and rearing gravel habitats for the Chinook salmon and steelhead and the proposed revegetation for fish and wildlife habitat improvements are needed not only to assure the survival of these species, but are also needed to meet the recreational needs of Central Valley fishermen and the livelihood of California's commercial fishermen.

Figure 1: Project Vicinity

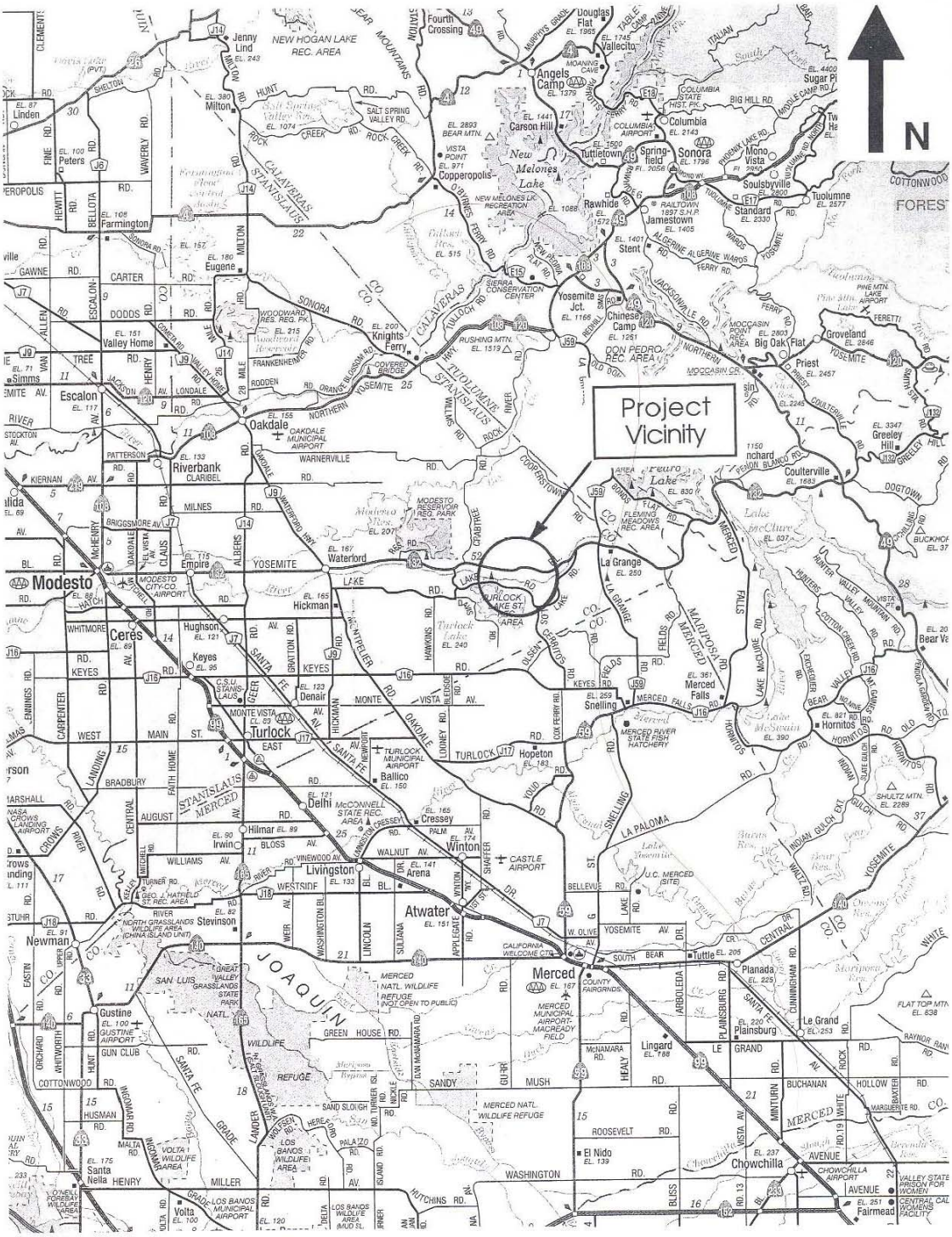


Figure 2: Project Boundaries

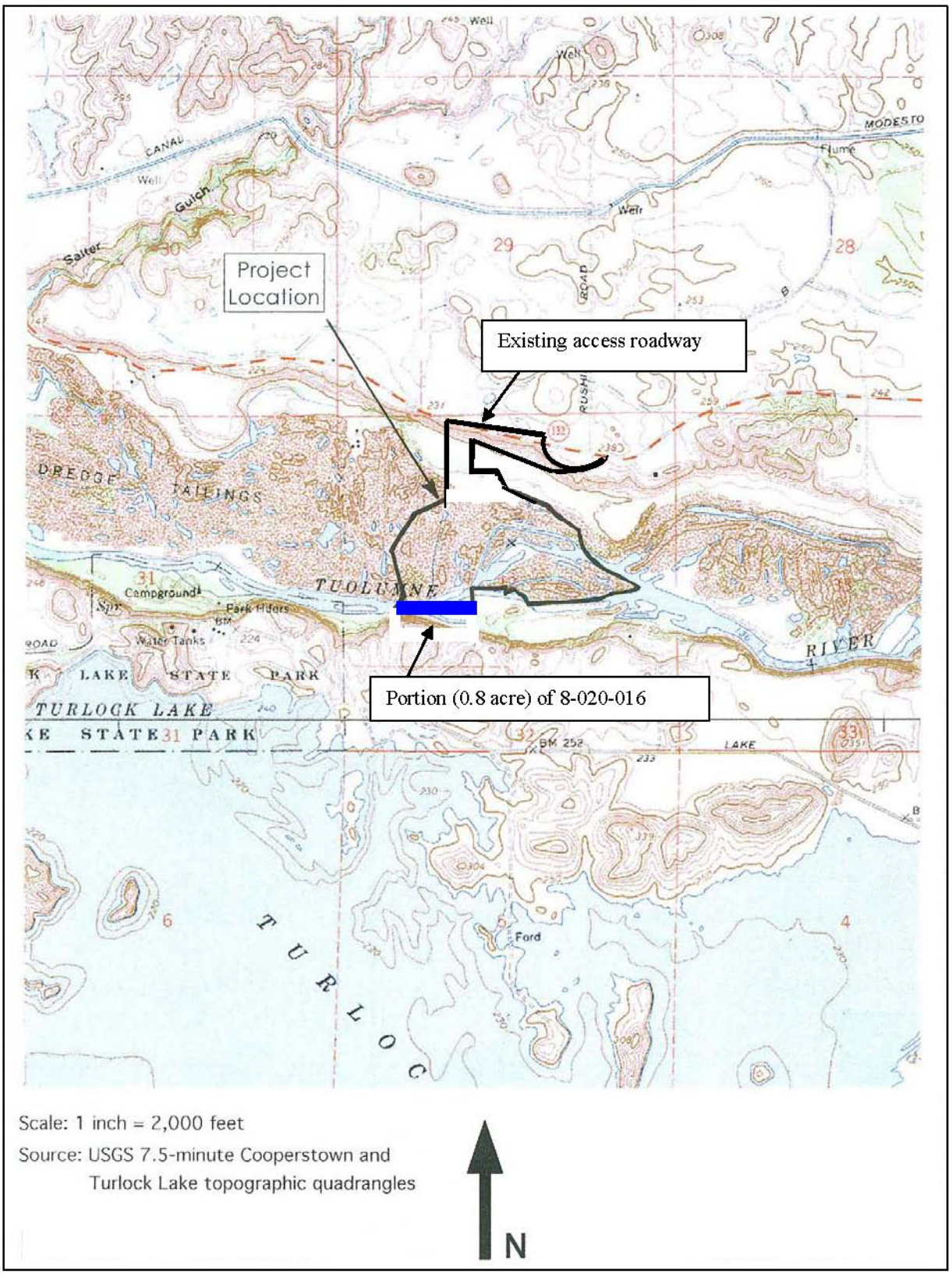
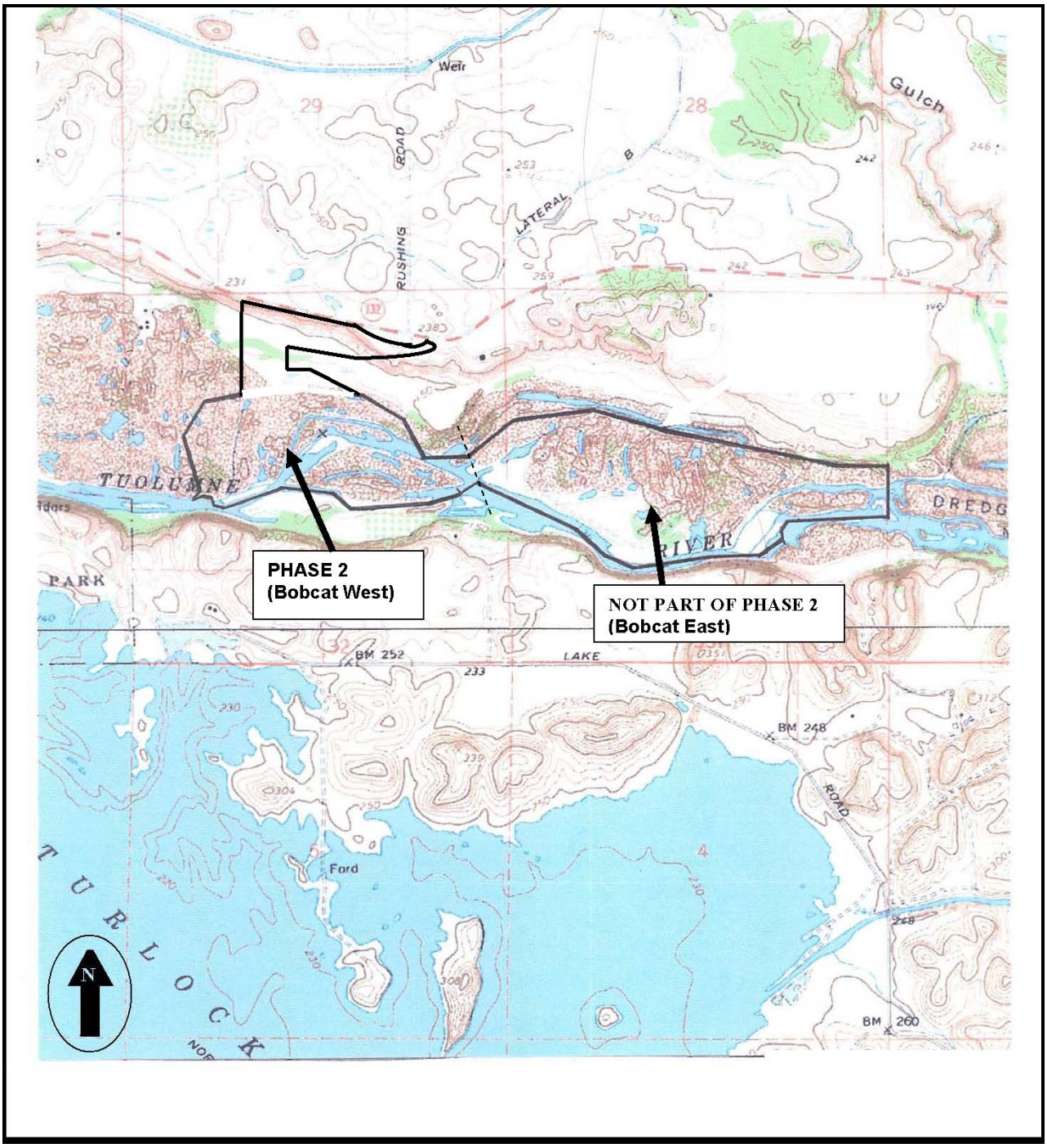


Figure 3: Full Bobcat Flat Restoration Site (All Phases – Bobcat East & Bobcat West)



6.0 SITE DESCRIPTION & EXISTING SITE CONDITIONS

The Bobcat Flat project is proposed to restore and enhance the quantity and quality of salmon and steelhead spawning and rearing habitat along the Tuolumne River in Stanislaus County, through reestablishment of natural floodplain processes where they have been altered during the past century.

The project site consists of three undeveloped agricultural parcels, totaling 335+ acres and a portion of a fourth parcel totaling 0.8± acre which contains River Mile 42.5± through River Mile 43.5± of the Tuolumne River, with some river meanders and an extensive floodplain. 52.07± acres of the Phase II Bobcat Flat Restoration site are considered Waters of the United States.

The area is 135± feet above mean sea level and is visible from the highway and homes on the bluff north of the site. Bobcat Flat is approximately seven highway miles west of the of the La Grange townsite and is bounded by a portion of the Tuolumne River and other agricultural parcels on the south, as well as other agricultural parcels to the north, west and east. A recreational parcel has a campground and paint ball facility to the northwest of the project site (the Tuolumne River Resort). Access to the site is provided directly from State Highway 132 to the project site. The site is completely fenced and the two locked gates prevent unauthorized access to the site. A ranch road meanders through the project site. The project site has been grazed during portions of the year to reduce the fire danger from overgrown vegetation. The owners propose to maintain grazing in portions of the site to assist with the control of non-native species. The site is posted for limited fishing access by Friends of the Tuolumne.

The Tuolumne River is a U.S. Geological Survey designated perennial stream, lined with Valley oaks, willows, cottonwoods and blackberries and has a large floodplain that is subject to flooding. River altering activities from the last century converted this reach of the Tuolumne River channel from a natural river pool-riffle sequence, to a lake-cascade stream morphology, with steep gravel gradients and long pools in between gravel bars, and with swift water. A peninsula on the western portion of the project site has a few gravel bars extending into the Tuolumne River.

On-site vegetation includes the Arroyo willow series, Fremont cottonwood series and California annual grassland series (Sawyer and Keeler-Wolf, 1995).

Wooded riparian areas along the north bank of the Tuolumne River within the Bobcat West Phase II project area will be minimally disturbed and only at the roadway crossings to access the river for gravel placement for the proposed salmon and steelhead spawning and rearing habitat. However, the project area has some remnant riparian vegetation that is degraded or altered from past mining or other land uses. Therefore, revegetation is proposed in the form of riparian habitat restoration and enhancement in previously disturbed areas as well as areas where trees, brush or other riparian vegetation will be removed during project execution.

Elderberries (*Sambucus mexicana*) are located on the project site. All elderberry shrubs located on the project site will be retained and will not be disturbed.

The eastern areas of the overall project site along the Tuolumne River are planned for future phased work for additional spawning and rearing habitat restoration and enhancement as funding becomes available in the future.

7.0 PERMITS, CONSULTATIONS, AUTHORIZATIONS, AGREEMENTS REQUIRED FOR THE PROPOSED PROJECT

This CEQA document is proposed to support the following permits, consultations, authorization and agreements required for the proposed project:

- Authorization under federal Clean Water Act Section 404 [**404 Permit**] (CWA Section 404);

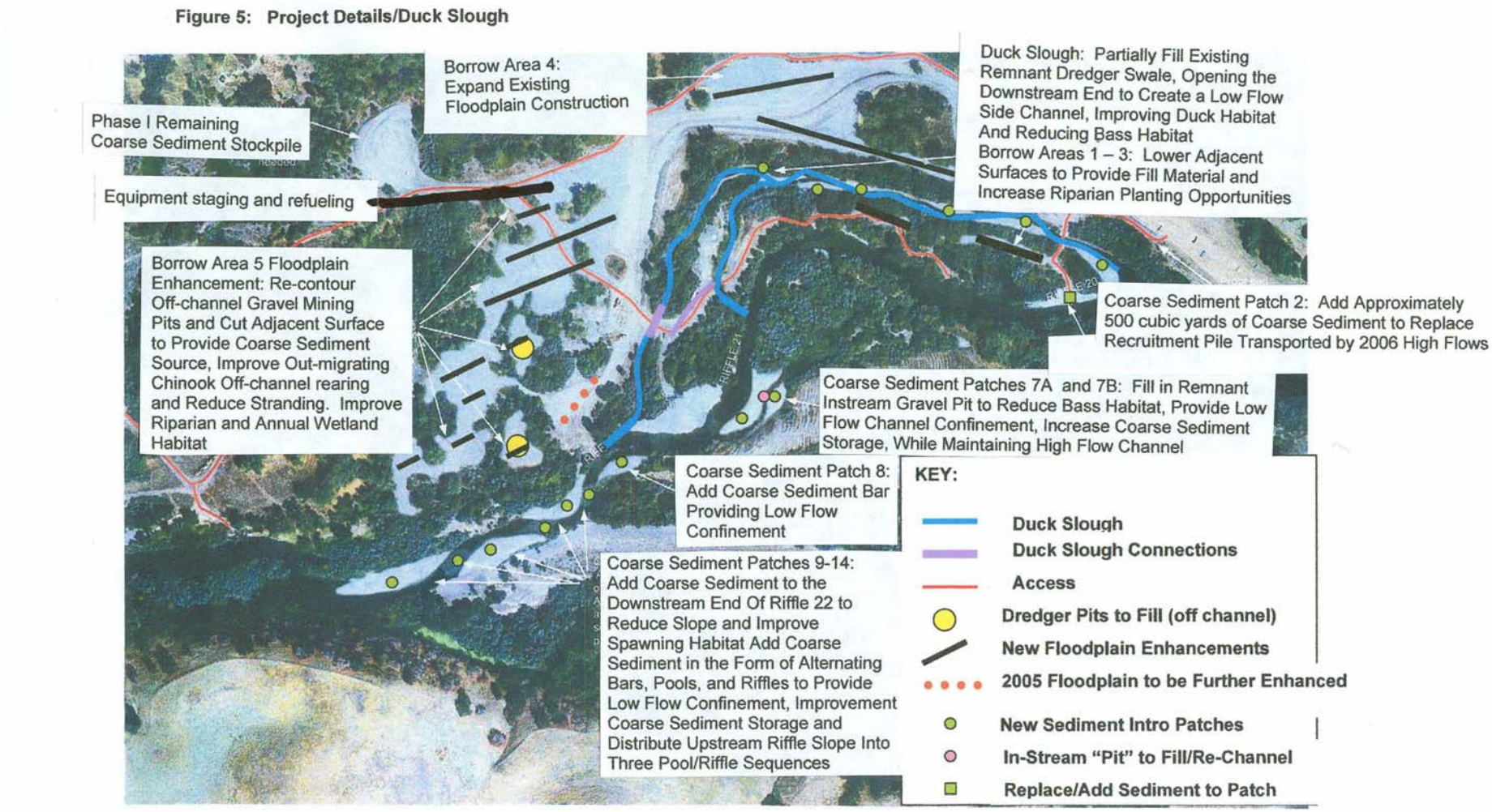
- A federal Clean Water Act Section 401 Water Quality Certification [**401 Permit**] (CWA Section 401); and
- A Lake or Streambed Alteration Agreement [**LSAA**] (California Fish and Game Code Section 1602 et seq.)
- Central Valley Flood Protection Board (CVFPB) [**Encroachment Permit**], (CA Code of Regulations, Title 23, Division 1, Article 3, Section 6)
- Grading Permit (or waiver) from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060)
- Prepare, submit and secure approval for a Dust Control Plan from the San Joaquin Valley Air Pollution Control District. (APCD, Regulation VIII)
- Secure an Authorization to Construct permit, or waiver, from the San Joaquin valley Air Pollution Control District (APCD Rule 2010)
- Encroachment Permit for the California State Lands Commission (Public Resources Code Section 6221)
- Conditional Use Permit, or Waiver, from the Stanislaus County Community Development Department (Stanislaus County Code Section 21.20.030)

8.0 PUBLIC CONCERNS & ISSUES

Adjoining property owners within 500 feet of the project boundaries and all jurisdictional agencies were notified of the proposed project and asked for their comments on the proposed project **Appendix E.** No public concerns were raised by adjoining parcel owners in response to the 2010 notification.

Figure 4: Project Design/Artist Rendering

Figure 5: Site Plan



ENVIRONMENTAL EVALUATION
FACTORS POTENTIALLY AFFECTED

The environmental factors checked below could be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the report on the following pages. Although the project as originally proposed could have had significant effect on the environment, there will not be a significant effect in this case, because project conditions, mitigation measures and project design features which minimize and/or avoid potential project effects have been made by or agreed to by the project proponent to alter the project to avoid potentially significant impacts. Therefore, a Mitigated Negative Declaration has been prepared for the proposed project.

☐	Aesthetics	☐	Agriculture Resources	☐	Air Quality
X	Biological Resources	**X**	Cultural Resources	**X**	Geology /Soils
X	Hazards & Hazardous Materials	**X**	Hydrology / Water Quality	☐	Land Use / Planning
☐	Mineral Resources	**X**	Noise	☐	Population / Housing
☐	Public Services	☐	Recreation	☐	Transportation/Traffic
☐	Utilities / Service Systems	☐	Mandatory Findings of Significance		

"Mitigated Negative Declaration: Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures or altered provisions of the project design has reduced an effect from a "Potentially Significant Impact" to a "Less Than Significant Impact." Project conditions, mitigation measures and project design features are briefly explained in each section of this report to state how they reduce the effect to a less than significant level.

I. AESTHETICS

General

The project site is visible from the highway and homes on the bluff north of the site. The project site is in a rural area approximately seven highway miles west of the La Grange town-site. The project site is bounded by a portion of the Tuolumne River and other agricultural parcels on the south, as well as other agricultural parcels to the north, west and east. A recreational parcel with a campground and paint ball facility is northwest of the project site (Tuolumne River Resort). The main entrance to the Turlock Lake State Recreation Area is located (line of sight) 1.55± miles from the western-most extent of the proposed project. The main portion of the SRA is day-use only; however, overnight accommodations are available at the 66 Site campground located on the south bank of the Tuolumne River with access from Lake Road. The eastern-most camp site is located 0.5± mile (line of sight) from the western-most portion of the project site.

The visual quality of the site may be altered temporarily with the extraction, stockpiling and processing of cobbles and coarse gravels from the on-site flood plain and dredger tailings and re-contouring for a new high flow channel. Areas of Valley-foothill riparian woodlands are not proposed to be altered by the project, excepting at the roadway crossings to access the river for gravel placement for the proposed salmon and steelhead spawning and rearing habitat.

a) "Would the project have a substantial adverse effect on a scenic vista?"

The project is partially visible from nearby the adjacent Highway 132 and nearby homes. Existing vegetation blocks a majority of the site from Highway 132 and nearby homes. Similarly, the majority of the Turlock Lake State Recreation Area is visually separated from the project site by low hillsides with peaks to 250± feet above mean sea level (amsl) and riparian vegetation screening the project site from the lake (project site elevations are generally below 150± feet amsl).

The SRA campground located downstream of the project site along the south shore of the Tuolumne River is accessed from Lake Road with the nearest camp site 0.5± mile (line of sight) from the western-most edge of the project site. The campground, located downstream of the project site along the river, is well-treed and separated from direct line-of-sight to the project by a partial river curve and a 250-foot high hill. The combination of vegetation, topography and river curve make the project site nearly invisible to the campground.

For those small portions of the project site that may be visible to the SRA and SRA campground, visual impacts include only temporary disturbances resulting from limited vegetation removal. Excavation has been planned to limit the removal of trees and shrubs on the project site and only to those areas necessary to access new gravel bars to be created or enhanced along the river on the project site. Specifically, the removal of six to eight valley oaks is anticipated as part of the project. In addition, impacts to individual oak trees to be retained on site could occur inadvertently during construction, a potentially significant adverse impact. To ensure protection of existing trees planned to be retained during the construction period, mitigation measures have been included to ensure that the areas within tree driplines are preserved including parking equipment and establishing stockpiles outside of driplines, while limiting stream crossings to those identified in the project site plan. Mitigation to provide replacement plantings for valley oaks removed also has been included. Removal of 36 ± willows and cottonwoods will be mitigated through extensive re-plantings as identified in **Appendix B**.

Proper implementation of these measures should reduce impacts to a less than significant level. Therefore, significant adverse visual quality impacts are not anticipated because new plants are to be planted to revegetate the dredged and altered flood plain resulting in an overall improvement to the site's visual character upon establishment of restoration plantings. The detailed revegetation plan for riparian habitat restoration and enhancement is included in **Appendix B** and will be implemented for disturbed areas on the project site. This revegetation effort will not only return the site to its pre-construction condition, but will result in an overall improvement to the scenic qualities of the site. A detailed description of the project's revegetation plan is included in **Appendix B.**

b) "Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?"

No impact is expected to Highway 132 in the vicinity of the proposed project and Highway 132 is not a designated state scenic highway. Minimal vegetation will be removed, no historic structures will be altered and no geologic formations will be altered. Therefore, no impacts to scenic resources are anticipated. (See also preceding)

c) "Would the project substantially degrade the existing visual character or quality of the site and its surroundings?"

The project would have less than a significant impact, because the project will only create a temporary disturbance to already disturbed soils with the removal of gravels from uplands. Existing soils are largely barren, except for relatively dense stands of non-native invasive yellow star thistle (*Centaurea solstitialis)* and non-native annual grasses [See **Section IV** (Biological Resources) for a discussion of star thistle control]. Disturbed soils will be revegetated after gravel removal to re-introduce native vegetation to previously barren areas. Therefore, the project is expected to return the site to a pre-mining riparian upland and floodway resulting in an overall improvement to the site's visual character upon establishment of restoration plantings.

d) "Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?"

No impact is expected from glaring lights, because no lighting and no sources of light or glare are proposed. Therefore, no adverse impacts to day or nighttime views are anticipated.

Conditions, Mitigation Measures, and Project Design Features Addressing Aesthetics:

The current project phase includes revegetating excavated areas. Future project phases will increase revegetation/rehabilitation efforts throughout the site. **Appendix B** provides a detailed description of the vegetation rehabilitation plan. (Project Description)

II. AGRICULTURAL RESOURCES

a) "Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?"

No impact is expected, because on-site soils are classified as DI (dredge and mine tailings). These soils meet neither the California Department of Conservation Farmland Mapping and Monitoring

Program criteria for prime or unique farmland, nor criteria for farmland of statewide importance. The soils do not meet any of the criteria for prime or potential prime agricultural land as established in the Stanislaus County General Plan.

b) "Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?"

No impact is expected. The project site has a Stanislaus County General Plan land use designation of Agriculture and is zoned A-2-40 (General Agriculture) under the Stanislaus County Zoning Code. The project site is subject to Williamson Act Land Conservation contracts with Stanislaus County and has been grazed during portions of the year to keep the fire danger down from overgrown vegetation. 140+ acres has been previously leveled and cultivated on the project site. The General Agriculture (A-2-40) zoning and Williamson Act Land Conservation contracts provide for open space uses, as well as agricultural uses. These open space and agricultural uses will not be in conflict with the proposed habitat restoration and enhancement project.

c) "Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?"

No impact is expected. The 335± acre project site will retain its Stanislaus County General Plan land use designation of Agriculture and its zoned A-2-40 (General Agriculture) under the Stanislaus County Zoning Code. The project site will remain in a Williamson Act or Land Conservation Act contract with Stanislaus County. The Williamson Act Land Conservation contract provides for open space uses, as well as agricultural uses. The proposed habitat restoration and enhancement project is an open space use, which is allowed in the Agricultural General Plan land use designation and the site will retain this land use.

Conditions, Mitigation Measures, and Project Design Features Addressing Agricultural Resources:

No potential impacts were identified. Therefore, no conditions, mitigation measures or design features have been included to reduce impacts.

III. AIR QUALITY

The San Joaquin Valley Air Pollution Control District reviewed the 2010 Phase II project (**Appendix F**). The following summarizes and responds to that reply:

- **Comment:** Emissions may exceed thresholds of significance for oxides of nitrogen (NOx), reactive organic gases (ROG) or Particulate Matter 10 microns or less (PM10). SJVAPCD recommends additional environmental review to identify and quantify project emissions.
  Response: See paragraph "a"

- Comment: Odors should be discussed
  Response: See below, paragraph "e"

- Comment: Toxic Air Contaminants (TACs) should be addressed (including preparation of a Health Risk Assessment).
  Response: Title 17, Section 93000 of the California Code of Regulations lists substances identified as toxic air contaminants by the California Air Resources Board. The only

substance on the TAC list with any potential to occur on the project site is asbestos (naturally occurring). On-site soils are classified as dredge and mine tailings (DI). The project area is a river floodplain comprised primarily of barren and unproductive silty sand, coarse sediments, gravel and cobbles. These soils are not composed of the anticipated sources of asbestos (serpentine, riebeckite, cummingtonite-grunerite, tremolite, actinolite or anthophyllite); therefore, that toxic material is not anticipated to occur. No off-site gravels will be hauled on-site; therefore, outside sources of asbestos also are not anticipated.

Similarly (although not identified as a toxic air contaminant), there is a potential for mercury to occur within the project boundaries (as a result of historic mining practices). See paragraph "a," Section VII (Hazardous Materials) for a discussion and project conditions, mitigation measures and project design features to prevent the introduction of mercury into the river in conjunction with the project

- Comment: The SJVAPCD would like to review mitigation measures if a mitigated negative declaration is prepared.
  Response: SJVAPCD will be provided a copy of the environmental document for the project upon completion.

- Comment: The document should include a discussion of whether or not the project would result in a cumulatively considerable net increase of any criteria pollutant or precursor for which SJV Air Basin is in non-attainment.
  Response: See paragraph "a."

- Comment: Discuss greenhouse gases (GHGs) generated by the project and any effect they might have on global climate change.
  Response: See paragraphs "f" and "g."

- Comment: If preliminary review indicates that preparation of an EIR is required; then discuss the methodology of analyzing impacts; discuss components and phases of the project associated with emission projections.
  Response: Preliminary review indicates preparation of a mitigated negative declaration (State) and environmental assessment (federal) are appropriate for the Phase II project.

- Comment: The project may require District permits. Prior to construction, the project proponent should contact the District's Small Business Assistance Office to determine if an Authority to Construct (ATC) is required.
  Response: The project proponents will be contacting the APCD to secure the appropriate permits as detailed in **Appendix A**.

- Comment: The project may be subject to District rules including: Fugitive PM10 Prohibitions (Regulation VIII), Nuisance (Rule 4102), Architectural Coatings, Cutback/Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations (Rule 4641).
  Response: he project proponents will be contacting the APCD to secure the appropriate permits in compliance with these rules as detailed in **Appendix A**.

- Comment: If an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants).
  Response: No buildings are being renovated, partially demolished or removed in conjunction with the project.

- Comment: Provide a copy of the District comments to the project proponent.
  Response: The project proponent and proponent's consultant team were provided a copy of District comments by the project's environmental consultant (APA, Inc.) on February 9, 2010.

a) "Would the project conflict with or obstruct implementation of the applicable air quality plan?"

The San Joaquin Valley's air quality has been designated non-attainment by the EPA and California Air Resources Board (ARB) for ozone (O_3) and fine particulate matter and dust (PM10). The Federal Clean Air Act (CAA) and California Clean Air Act require areas designated non-attainment to reduce emissions until standards are met. The proposed rehabilitation activities associated with the project can generate emissions from the movement of soil, use of heavy equipment, processing gravels and related activities and, therefore is subject to the San Joaquin Valley Air Pollution Control District (SJVAPCD) Regulation VIII (Fugitive Dust Prohibitions). Since 2004, Dust Control Plans must be prepared for non-residential projects of 5.0 acres or more in size—hence, a Dust Control Plan will be prepared for the proposed project. The Dust Control Plan is expected to include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities, on haul roads, and for dry screening operations a mist screen above/through the dust when heavy dust is generated by the screen plant as prescribed by the SJVAPCD. In addition, some equipment used for processing gravels and constructing access roads may be subject to the District's Permit to Operate requirements (.e.g., pumps in excess of 50 hp; screening equipment) and must obtain an Authority to Construct Permit. The Authority to Construct Permit ensures that equipment used is certified for compliance with noise and air quality requirements of the State of California. Compliance with these regulations will ensure that the project is consistent with the region's air quality plan and are included in **Appendix A**.

b) "Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?"

See proceeding.

c) "Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?"

See the preceding.

d) "Would the project expose sensitive receptors to substantial pollutant concentrations?"

No impact is expected because the proposed project will not generate substantial pollutant concentrations and there are no sensitive receptors in the vicinity of the proposed project. The project site is located in rural farmland. Brush shall be re-used on site to provide habitat for birds to the extent feasible. If burning is required for on-site brush; a burn permit shall first be secured from the San Joaquin Valley Air Pollution Control District per a condition in **Appendix A**.

e) "Would the project create objectionable odors affecting a substantial number of people?"

No impact is expected, because the proposed sediment introduction project is not anticipated to create any new odors. Any temporary odors that might be generated from motor vehicles during project construction would be no different than those generated by traffic currently on State Route 132 in the project vicinity.

f) "Would the project generate greenhouse gas emissions, either directly or indirectly that may have a significant effect on the environment?"

The Phase II Bobcat Flat Restoration Project temporarily will generate Greenhouse Gas Emissions (GHGs--specifically carbon dioxide) through the operation of heavy equipment to extract and sort sediments and vehicle trips to and from the project site throughout the construction process which is anticipated to extend for approximately 30, 10-hour days. This increase in GHGs is quantified as follows:

Table 1: Gross Emissions (CO_2 Equivalents)

Equipment	Estimated Hours	Estimated gallons diesel
1 – CEC 6X16 or 5X12 Screen Plant	300	400 gallons per day X 30 days = **12,000** gallons for project for listed equipment
1 Hyundai 780 Loader	300	
1-CAT 966 Loader Serial #: 9RS01223 Model: CAT 966G	300	
1-CAT 16 blade	200	
1-CAT 350-D Articulated Hauler	300	
1-CAT D-6 Dozer	100	
1 – Water tender	300	
Water Pump – Hyundai 770 loader engine to be used	120	
Total Estimated Emissions		**121.89** Metric tons of carbon dioxide equivalents

(a) CO_2 emissions from a gallon of diesel = 2,778 grams x 0.99 x (44/12) = 10,084 grams = 10.1 kg/gallon = 22.2 pounds per gallon of diesel per http://www.epa.gov/oms/climate/420f05001.htm

Table 2: Emissions Detail (Converted to CO_2 Equivalents)

CO2 10.14 kg (10,138 g) CO2 per gal/a/	**Methane .00874 kg (8.74 g) CO2 equiv per gal/a/**	**Nitrous Oxide .0258 kg (25.8 g) CO2 equiv per gal/a/**	**Grand Total**
121,885 kg (121.89 metric tons)	91.77 kg (0.9 metric	270.9 kg 0.27 metric	
121.68	**1.03**	**0.31**	**122.30 (b)**

(a) http://www.arb.ca.gov (Documentation of California's Greenhouse Gas Inventory

(b) Does not equal 121.89 (Table 1 total) due to rounding

The state's total GHG emissions are quantified as 427,000,000 metric tons of CO_2 equivalent. The total emissions projected for the project are 107.4± metric tons of CO_2 equivalent. This represents less than 0.00000025± percent of the state's annual GHG emissions which represents a less than significant effect. In addition, replacing herbaceous non-native species and barren soils with willows and riparian associates through the execution of project revegetation efforts is over time, expected to increase carbon sequestration on the site thus resulting in an overall reduction in GHG emission. This is a potentially beneficial outcome from completing all phases of the project.

g) "Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?"

The San Joaquin Valley Air Pollution Control District adopted a District Policy addressing GHG Emission Impacts for stationary source projects under CEQA on December 17, 2009. In short, the District has established some and will continue to establish other Best Performance Standards (BPS). BPS are defined as the most effective Achieved-in-Practice means of reducing or limiting GHG emissions from GHG emissions sources. For traditional stationary source projects, BPS include equipment type, equipment design, operational and maintenance practices for the identified service, operation, or emissions unit class and category. Per SJVAPCD Policy; projects implementing BPS will be determined to have a less than significant individual or cumulative impact on global climate change and are not required to provide project specific quantification of GHG emissions. Projects not implementing BPS are required to quantify project specific GHG emission and reduce those GHG emissions by 29% to be determined to have a less than significant individual or cumulative impact on global climate change. Because the SJVAPCD has not yet adopted BPS for projects such as Bobcat Flat; for the proposed project the analysis in the preceding paragraph is presented in-lieu of BPS.

Conditions, Mitigation Measures, and Project Design Features Addressing Air Quality:

a. **AQ-01**. Prior to commencing construction; prepare and submit for approval, a Dust Control Plan pursuant to Regulation VIII of the San Joaquin Valley Air Pollution Control District (4230 Kiernan Ave., Suite 130; Modesto, CA 95356; (209) 557-6400; www.valleyair.org). The Dust

Control Plan is expected to include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities and on haul roads (APCD, Regulation VIII).

b. **AQ-02.** Prior to commencing construction; obtain an Authority to Construct permit or waiver from the San Joaquin Valley Air Pollution Control District and whether the project may be subject to District rules including: Fugitive PM10 Prohibitions (Regulation VIII), Nuisance (Rule 4102), Architectural Coatings, Cutback/Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations. (APCD Regulation VIII; Rules 2010, 4102 and 4641)

c. **AQ-03.** If burning is required for on-site brush; a burn permit shall first be secured from the San Joaquin Valley Air Pollution Control District. (APCD, Regulation 4103; See also: Initial Study, "Biological Resources" regarding re-use of brush on site for bird habitat)

IV. BIOLOGICAL RESOURCES

Moore Biological Consultants prepared a baseline biological resources inventory for the Bobcat Flat Restoration Project in 2010. The 2010 Biological Study evaluates the potential for special status plant, fish and animal species to occur within or adjacent to the project site based on site surveys in 2004, updated site surveys in 2009, and a review of species lists from the California Natural Diversity Database (2009) and USFWS (2009) for both Cooperstown and Turlock Lake 7.5 minute quadrangles.

The findings of that study are included in: "*Baseline Biological Resources Assessment: Bobcat Flat River Mile (RM) 43 Phase II Restoration Project, Stanislaus County, California*"; March 11, 2010, previously incorporated by reference, included as **Appendix C**, and summarized as follows**:**

a) "Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?"

INVERTEBRATES

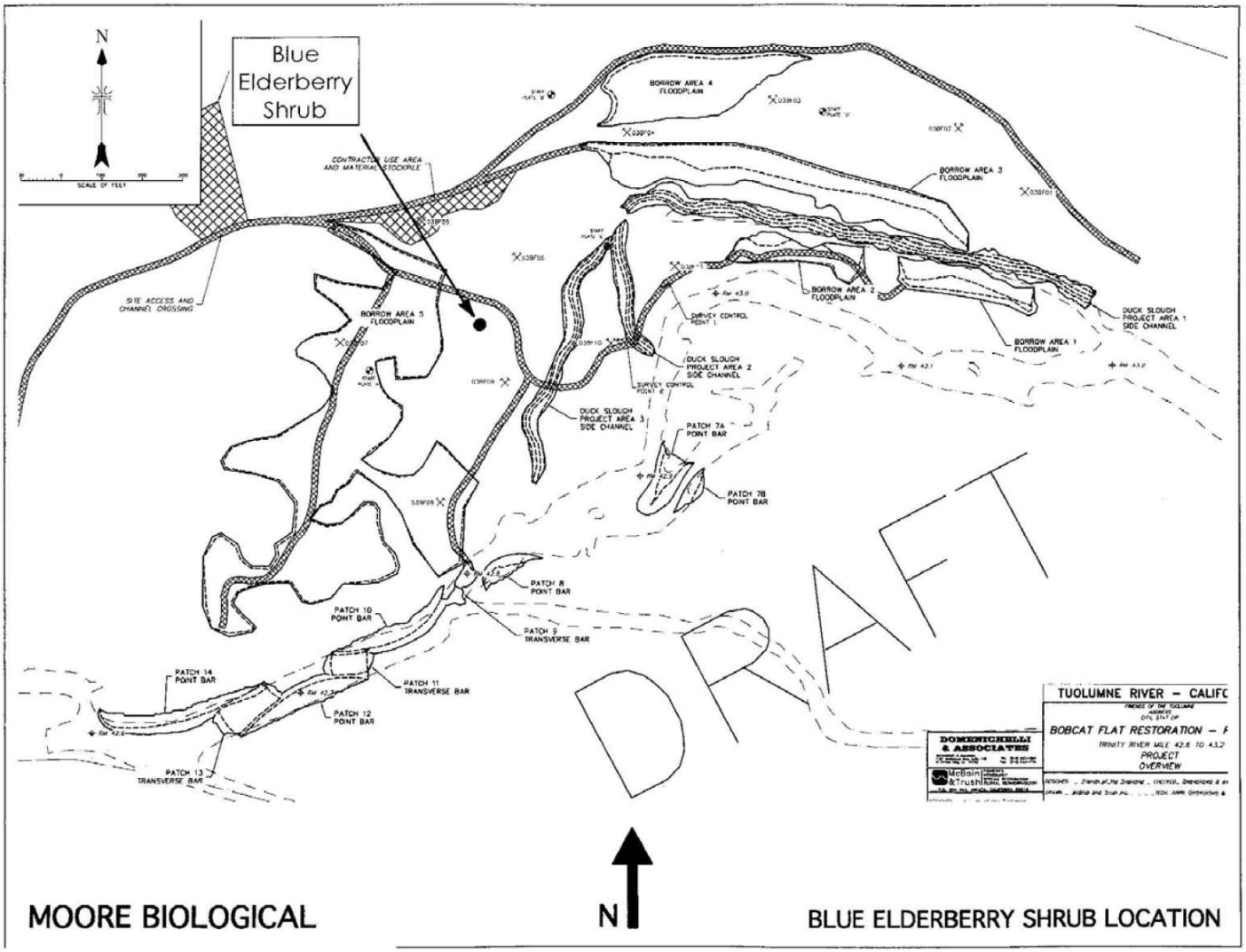
Valley elderberry longhorn beetle (*Desmocerus californica dimorphus*) – Federally-listed Threatened. Habitat occurs on site.

Eleven elderberry bushes (S*ambucus mexicanus)*, ranging in size from 5 to 30 feet in height, were identified within the 335±-acre project site (**Appendix C**). The bushes may provide habitat for the Valley elderberry longhorn beetle. Exit holes suggestive of use by the beetle were identified in all of the shrubs. Only one of these shrubs (Shrub K – **Figure 6)** is located within the boundaries of the current (Bobcat West) project in the vicinity of areas designated for excavation (existence reconfirmed in 2009).

Elderberry Shrub K (**Figure 6**) is located approximately 20 feet from the edge of an existing access roadway (i.e., encroachment within 100 feet of the shrub has been continuously and historically in existence). During the flight period of the beetle (March 15-June 15); no construction work will occur within 100 feet of the dripline of any elderberry shrub (including "Shrub "K"). In addition, no encroachment within the vicinity of the elderberry will occur closer than the edge of the existing traveled roadway. The shrub will be protected with temporary safety fencing during extraction and enhancement activities for a distance of at least 20 feet from the outer edge of the drip line of the elderberry.

Based on informal consultation with the USFWS, it has been determined that through implementation of the above avoidance and minimization measures, there will be no direct or indirect impacts to VELB. In the unanticipated event that project conditions, mitigation measures and project design features render complete avoidance of any of the remaining elderberry shrubs infeasible, formal consultation with USFWS would need to be undertaken to further assess the potential impacts to VELB and determine the need for mitigation. Under this scenario, any needed mitigation would likely be accomplished pursuant to the mitigation guidelines for VELB (USFWS, 1999).

Figure 6: Elderberry Shrub Location



FISHERIES

Spring-run Chinook salmon (*Oncorynchus tshawytscha*), a Federally and State listed Threatened species. While historically present and one or more strays may occur in the Tuolumne River some years, viable populations are unlikely to occur.

Fall-run Chinook salmon (*Oncorynchus tshawytscha),* California species of concern. Known to occur on site.

Winter-run Chinook salmon (*Oncorynchus tshawytscha*), a Federally and State listed Endangered species. While historically present and one or more strays may occur in the Tuolumne River some years, viable populations are unlikely to occur.

Central Valley steelhead [*Oncorynchus mykiss (irideus)*], Federally-listed Threatened. Known to occur on site.

Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*) and Central Valley steelhead (*Oncorhynchus mykiss*) inhabit this reach of the Tuolumne River.[1] Fall-run Chinook salmon normally are found within this reach of the Tuolumne River before June 15th and after October 15th. An in-stream work window of July 15th to October 15th has been established to avoid impacts to this species (see also discussions following regarding construction windows for the western pond turtle).

Juvenile steelhead may inhabit the river year-round. Without implementation of mitigation measures, pumping water from the river for gravel washing could result in entrainment of juvenile steelhead. It is anticipated that some water will be pumped from the river even with the use of dry-screening for gravels. Dry screening will employ a mist screen above/through the dust when heavy dust is generated by the screen plant in accordance with SJVUAPCD regulations. To avoid the potential impact associated with pumping river water, the pump hose shall be fitted with a NMFS-approved screen to exclude juvenile fish. In addition, large river rock shall cover the pump inlet and filter to reduce velocity and avoid impacts to juvenile fish which could otherwise occur from suction. Alternatively, water may be pumped from on-site ponds using the same NMFS approved screening and velocity reduction methods. These measures are expected to avoid potential impacts to juvenile steelhead and reduce impacts to a level of less-than-significant. Central Valley drainages, including the Tuolumne River, have recently been classified as designated Critical Habitat for federally listed salmonids. The project site is located within the Central Valley California Steelhead Evolutionary Significant Unit (ESU). In addition, the project site falls within designated Essential Fish Habitat (EFH) for fall-run Chinook salmon.

Public Law 104-267, the Sustainable Fisheries Act of 1996, amended the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to establish new requirements for EFH. EFH includes those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. When a project is identified as being located within EFH, consultation with the NOAA Fisheries (NMFS) is required. Consultation with NMFS has been completed in conjunction with Section 7 Consultations undertaken by the U.S. Fish and Wildlife Service for this project.

[1] In 2001, the California Department of Fish and Game (CDFG) conducted fish carcass and redd surveys to identify the spawning habitat in this reach of the Tuolumne River. CDFG identified a much lower rate of spawning in the project section of the river than was found upstream. CDFG has established a goal to reestablish appropriate spawning and rearing habitat for the Chinook salmon and steelhead in the project portion of the river.

Because the proposed project will enhance existing and increase the total amount of spawning and rearing habitat for salmonids in this reach of the Tuolumne River; the project will not result in the elimination of EFH. Instead, the project will result in an increase in the quality of EFH along this stretch of the Tuolumne River. Similarly, because work will occur outside of the period in which fall-run Chinook will occupy the river; no temporary disruption of the use of EFH by Chinook salmon will occur. Finally, due to conditions, mitigation measures, and project design features (**Appendix A**) which will maintain water quality within this reach of the river (e.g., erosion control, sediment basins, locating work areas 500± feet from the stream area and revegetation plans); no adverse impacts to water quality within the EFH will occur. Therefore; no adverse impacts will occur with respect to EFH—instead beneficial impacts to EFH are anticipated with implementation of the proposed project.

BIRDS

California horned lark (*Eremophilia alpestris actica)* - California Watch List (WL). Potential nesting habitat on site possible.

Tricolored blackbird (*Agelaius tricolo*r) - California species of concern for nesting areas. Potential nesting and foraging habitat on the site.

Mountain Plover (*Charadrius montanus*), California species of concern and a proposed Federal Candidate species for listing. May occasionally fly over the project site, but the species is unlikely to nest or forage on site.

Swainson's hawk (*Buteo swainsoni*). California listed threatened. Potential for nesting and foraging habitat on the site.

In addition to Swainson's hawk, numerous state species of concern, fully-protected species, and species of concern to Partners in Flight are present or may occur on site. Special status birds identified on site include: the State fully protected white-tailed kite (*Elanus leucurus*), the State fully protected bald eagle (*Haliaeetus leucocephalus*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), great blue heron (*Ardea herodias*), American bittern (*Botaurus lentiginosus*), and the double-crested cormorant (*Phalacrocorax auritus*). The status, habitat requirements, presence or absence and nature of the species use of the site are described in **Appendix C**.

Pursuant to Section 15065(a)(1)of the State California Environmental Quality Act (CEQA) Guidelines; impacts to these species which could drop their species survival to a level that they might become listed as Endangered, should be avoided. Similarly, the Migratory Bird Treaty Act (16.U.S.C. 703-711; 50 CFR Part 10) states that it will be unlawful at any time, by any means or in any manner to pursue, hunt, take, capture, kill, attempt to take, capture, or kill….any migratory bird, any part, nest, or eggs of such birds.

Pursuant to Fish and Game Code Sections 3511, 4700, 5050, and 5515, the CDFG has jurisdiction over Fully Protected Species of birds, mammals, amphibians and reptiles, and fish. As defined in Fish and Game Code Section 86, "take" of any Fully Protected Species is prohibited in all circumstances, and the CDFG cannot authorize their take through the incidental activities of any project. Fully Protected Species that are known to occur on the proposed project site include the bald eagle, and white-tailed kite. Therefore, complete avoidance for these species must be in place at all times if the species is found to be present on-site during any portion of the project activities.

In addition, Fish and Game Code Section 2081 gives the CDFG regulatory authority over projects that could result in the "take" of any species listed by the State as threatened or endangered, or designated as a candidate for listing. If the Project could result in the "take" of any species pursuant to CESA, CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (Sections 21001(c), 21083, Guidelines Sections 15380, 15064, 15065). The State listed threatened Swainson's hawk has the potential to nest and forage on the project site.

To minimize nest disturbances and to avoid impacts to nesting birds subject to the MBTA and CDFG Code Sections 2081 and 3511 the following measures will be implemented:

a. When feasible, trees that need to be removed will be felled between September 1st and January 31st, outside of the general nesting season for raptors and other birds.

b. When feasible, brush and vegetation that needs to be removed will be done between September 1st and January 31st, outside of the general nesting season for raptors and other birds.

c. In the event that trees or vegetation removal must occur during the avian nesting season (between February 1st and August 30th), nesting bird surveys will be conducted by a qualified biologist no more than 30 days before initiating ground disturbance or vegetation removal activities to verify that no nesting sites will be impacted by project construction.

d. If trees or vegetation must be removed during the avian nesting season (between February 1st and August 30th) and if active nests are found during the required nesting bird surveys or through other means, a minimum 100-foot buffer zone will be established around all active nests, and this buffer will remain around each active nest until a qualified biologist has determined that the young have fledged.

e. If a nesting Swainson's hawk, bald eagle or white-tailed kite is identified on-site or within 0.5 miles of the construction site, a minimum 0.25 mile buffer will be established around each nest and CDFG will be notified within 24 hours of identifying the active nest. Routine monitoring, as directed by CDFG, of these nests will be required, and the buffer zones may need to be enlarged if it appears that project-related activities are or could be causing stress to nesting birds and/or their eggs/young.

f. Workers on site will be educated to recognize Swainson's hawk, bald eagles, white-tailed kites and other special status birds and their nests to avoid accidental direct impacts (i.e., "take") by removing trees or bushes containing active nest trees or disturbing nesting activities with construction encroachment. Measures to avoid impacts to nesting birds will be implemented by workers and include delineating and adhering to buffer zones.

<u>REPTILES</u>
Western pond turtle (*Actinemys marmorata* formerly *Emys marmorata,* formerly *Clemmys marmorata*) – California species of concern. Known to occur on site.

A single western pond turtle was observed on site in association with one of the large, on-site ponds during 2002-2004 surveys. Eggs are laid in loose soil on land normally in oak woodlands, mixed coniferous forests, broadleaf forests and grasslands--usually within 400 feet of ponds, lakes, slow streams and marshes with vegetated borders, rocks, or logs—and up to 402 meters from water sources (CDFG, 1994). Hatchlings normally emerge by November.

While turtles are known to lay their eggs in uplands, the proposed excavation areas on-site are highly compacted and it is extremely unlikely that this species could establish a nest in these soils. However, a few sandy pockets of soil do exist throughout the project site. To ensure that no impacts to turtles will occur during project execution, pre-construction surveys will be conducted no more than 30 days prior to ground disturbance to determine the presence of turtles and/or turtle nests in all areas of the project area footprint within 500 feet of ponds or surface water channels and surveys will be conducted by a qualified biologist. In the unlikely event that a nest is found, a 50 foot buffer will be established around the nest. This will ensure that no impacts to nest sites for the species will occur.

The potential exists to encounter turtles in-stream during gravel placement. Potential impacts to the species will be minimized by scheduling in-water work in the late-summer or early fall. Therefore, the work window of June 15th to October 15th established to avoid salmonids has been adjusted to one month later in the summer to avoid potential impacts to turtles (i.e., to July 15th to October 15th). Finally, it is possible that turtles could be found around the edges of ponds or other wetland habitats (during or outside of breeding season). Workers on site will be educated to recognize and look for the turtles moving about the project site to avoid accidental direct impacts (i.e., "take") to one or more individual western pond turtles (e.g., driving over turtles with construction equipment as turtles cross roadways or the active project site). Measures included to avoid impacts to turtles to be implemented by workers include project conditions, mitigation measures and project design features including but not limited to ramps to ensure that turtles can escape from the steep-walled sedimentation pits allowing turtles to leave a roadway or construction zone before continuing work, and a speed limit for construction equipment. Proper implementation of these avoidance and minimization measures will ensure that the project will have less than a significant impact on this species.

Because the project would 1) create only a temporary disturbance to the area surrounding special species habitats; 2) will avoid disruption to nesting or breeding sites of special status species during the nesting or breeding season; and 3) ultimately will result in the enhancement and restoration of the habitats for special status wildlife species, the project outcome is expected to effect an overall beneficial impact to western pond turtle and other wildlife species.

Plants

The following discussion supplements the botanical findings included in the *"Baseline Biological Resources Assessment; Bobcat Flat River Mile (RM) 43 Phase II Restoration Project, Stanislaus County, California"*; March 11, 2010, previously incorporated by reference, included as **Appendix C**.

Based on an April 19, 2010 survey conducted by CDFG (see Appendix H), it was determined that although Merced Monardella (*Monardella leucocephala*) has been reported from sandy soils bordering rivers in the vicinity, it was collected on low, rolling hills in sandy, subalkaline grassland that are not present of the project site. Therefore, it is not anticipated that the project site provides the appropriate habitat for this species.

Two additional genera that include special status species known from the Cooperstown 7.5-minute quadrangle or adjacent quadrangles were found on site: A *Cryptantha* species and a *Clarkia* species. The *Cryptantha* was identified as the common *Crypthantha flaccida* scattered throughout the proposed borrow areas. A *Clarkia* species was also found in the borrow areas, but had nut yet begun to flower and could not be keyed. However, it is not anticipated to be the rare *Clarkia rostrata* because that species is known from steep shaded north-facing slopes in

grasslands and oak/pine woodlands that are not consistent with the on-site habitat. The Jepson Manual (1993 edition, page 792) notes that *Clarkia rostrata* occurrences reported from the Merced River drainage were "probably ephemeral populations."

General

To ensure that wildlife does not become entangled in debris (e.g., soda packaging materials), get caught in trenches, or be injured by heavy equipment and to avoid attracting wildlife to the site during construction which could result in a significant adverse impact to individuals; project conditions, mitigation measures and project design features include clean-up of food-related trash items such as wrappers, cans, bottles, and food scraps at least every three days from the project site; checking, providing ramps or other escape routes, and covering deep trenches during construction; and minimizing equipment speeds on site. Proper implementation of these measures is expected to reduce any potential impacts to a level of less-than-significant.

b) "Will the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?"

On-site vegetation includes the Arroyo willow series, Fremont cottonwood series and California annual grassland series (Sawyer and Keeler-Wolf, 1995). Plant species observed during botanical surveys are listed in **Appendix C**. Wooded areas are proposed for retention excepting at the roadway crossings to access the river for gravel placement for proposed salmon and steelhead spawning and rearing habitat. Where the on-site woodlands have been degraded or altered, revegetation is proposed for riparian habitat restoration and enhancement along the north side of this reach of Tuolumne River.

In addition, the site is vegetated by numerous non-native invasive species, including star thistle (*Centaurea solstitialis*). Due to the use of state and federal funds for the proposed project; the project will include provisions for complying with Executive Order 13112, Invasive Species, to:

> *"…prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological and human health impacts that invasive species cause…"*

Provisions to address non-native invasive species included project conditions, mitigation measures and project design features educating construction personnel regarding weed control and spread prevention; washing construction equipment prior to entering the project area; use of only native, noninvasive species and certified weed free materials and similar measures. Implementation of these measures will ensure that the spread of non-native invasive species will not be encouraged through implementation of the proposed project.

On-site wetlands do not include vernal pools; therefore, this habitat type will not be impacted and the likelihood for special status plants, invertebrates and amphibians reliant on vernal pools is considered unlikely.

c) "Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?"

An estimated 52.07± acres of jurisdictional waters of the U.S. occur within the Phase II project boundary. These waters encompass the Tuolumne River area inundated at river flows of 5,000±

cubic feet per second (cfs) [McBain & Trush, 2004 and 2009] and including Duck Slough. Because work will occur within the floodplain (within federally protected wetlands as defined by Section 404 of the Clean Water Act); a Section 404 Clean Water Act permit shall be obtained from the U.S. Army Corps of Engineers and a Section 401 Water Quality Certification also will be obtained prior to project construction. Similarly, for in-stream work and work in the state-designated floodway and Duck Slough, the project proponents will enter into a Lake or Streambed Alteration Agreement pursuant to Section 1602 of the California Fish and Game Code, acquire a Central Valley Flood Protection Board (CVFPB) Encroachment Permit (CA Code of Regulations, Title 23, Division 1, Article 3, Section 6) and acquire an Encroachment Permit from the California State Lands Commission (Public Resources Code Section 6221).

Project conditions, mitigation measures and project design features addressing water quality (and thereby reducing impacts on fisheries) are discussed the Hydrology and Water Quality portion of this initial study (See "Hydrology and Water Quality" paragraphs b, c and f) and include: erosion control best management practices, limiting the removal of mature trees and shrubs, preparing a spill response plan to address the appropriate methods for containing accidental spills of toxic materials (e.g., engine oils), restricting gravel processing areas to 500 feet from the river channel (see also Hazardous Materials), storing and washing equipment and construction materials at least 500 feet from the river channel, refueling outside of the floodplain and limiting stream and pond crossings

Proper implementation of these mitigation measures are expected to reduce potential impacts to water quality to a level of less-than-significant.

Wetland habitat values will be enhanced by the proposed project through revegetation (**Appendix B**) and recontouring the floodplain to a more natural morphology. Therefore, the project is not anticipated to have a substantial adverse impact on federally protected wetlands as defined by Section 404, but to result in an overall enhancement of wetland values.

See also paragraph "b."

d) "Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?"

As described in the proposal, the project would have a less than significant impact on fish or wildlife movement corridors, because the project will create only a temporary disturbance to the area surrounding special species habitats, will avoid disruption to nesting or breeding sites of special status species during the nesting or breeding season, and will result in the enhancement and restoration of the habitats for special status wildlife and fish species, such as the steelhead and Chinook salmon. See also paragraph "a."

e) "Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?"

Stanislaus County maintains neither a tree preservation ordinance nor policy. Local policies for the protection of biological resources are derived through the California Environmental Quality Act (CEQA) review guidelines, including compliance with Section 21083.4 of the California Environmental Quality Act (Oak Woodlands). Pursuant to this legislation, a county must determine if a project has the potential to create a significant adverse impact on an oak woodland and mitigate accordingly.

Removal of six to eight valley oaks is anticipated as part of the project. In addition, impacts to individual oak trees to be retained on site could occur inadvertently during construction, a potentially significant adverse impact. To ensure protection of existing trees during the construction period, mitigation measures have been included to ensure that the areas within tree driplines are preserved including parking equipment and establishing stockpiles outside of driplines, while limiting stream crossings to those identified in the project site plan. Mitigation to provide replacement plantings for valley oaks removed also has been included. Removal of 36 ± willows and cottonwoods will be mitigated through extensive re-plantings as identified in **Appendix B**. Proper implementation of these measures should reduce impacts to a less than significant level.

f) "Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?"

No Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local habitat conservation plan exists in the project boundaries or the vicinity.

Many impacts expected from this project have been analyzed in the following regional programmatic documents that identified the need for the proposed project:

- Final Programmatic EIS/EIR for the CALFED Bay-Delta Program (July 2000);
- CALFED Bay-Delta Record of Decision (August 28, 2000);
- CALFED Bay-Delta Program's Ecosystem Restoration Program Plan (1999);
- The Multi-species Conservation Strategy, prepared for CALFED Bay-Delta Program (July 2000);
- CVPIA Programmatic EIS/EIR (October 1999).

Consistency of the preceding documents with the proposed project is described in detail in **Appendix G.**

Conditions, Mitigation Measures, and Project Design Features Addressing Biological Resources:

1. **MITIGATION MEASURE BIO-01:** In-stream work shall be limited to July 15th to October 15th to avoid spawning and rearing, and out migration periods for the Chinook salmon and steelhead.

   MITIGATION MONITORING BIO-01: Prior to moving equipment onto the project site and before ground or vegetation disturbance, whichever occurs first, a pre-construction meeting shall be conducted to brief all contractors and workers regarding:

   a. Access routes to the construction area and the size of staging and work areas will be limited to the minimum necessary to achieve the project goals. Routes and boundaries of the access roads will be clearly marked prior to initiating construction/grading.

   b. Timing for in-stream work (July 15th to October 15th and restricted to the hours of 7:00 a.m. to 7:00 p.m.)

   c. All food and food related trash will be enclosed in sealed trash containers at the end of each workday and removed completely from the construction site once every three days.

d. No pets will be allowed on the construction site.

e. No firearms will be allowed on the construction site.

f. A speed limit of 15 mph on dirt roads will be maintained.

g. All equipment will be maintained such that there will be no leaks of automotive fluids such as fuels, oils, and solvents. Any fuel or oil leaks will be cleaned up immediately and disposed of properly.

h. Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 500 feet from the channel.

i. Other conditions necessary to minimize and avoid project impacts.

A designated qualified project Biologist shall be on-site daily while construction and/or surface disturbing activities are taking place to ensure measures to minimize impacts to wildlife and other biological resources, to ensure compliance with all mitigation and avoidance measures, to check all exclusion zones; and to ensure that signs, stakes, and fencing are intact, and that human activities are restricted to outside of these protective zones. The designated project Representative or project Biologist shall prepare written records summarizing oversight activities and compliance inspections and document survey results.

(Responsible Entity: Friends of the Tuolumne)

2. **MITIGATION MEASURE BIO-02:** When feasible, tree and brush removal shall occur between February 1st and August 30th to avoid the general nesting season for raptors and other birds. In the event that trees or vegetation removal must occur during the avian nesting season (between February 1st and August 30th)' nesting bird surveys shall be conducted by a qualified biologist no more than 30 days before initiating tree or brush removal activities to verify that no nesting sites will be impacted.

   If active nests are found during the required nesting bird surveys or through other means, a minimum 100-foot buffer zone shall be established around all active nests, and this buffer will remain around each active nest until a qualified biologist has determined that the young have fledged. If a nesting Swainson's hawk, bald eagle or white-tailed kite is identified on-site or within 0.5 miles of the construction site, a minimum 0.25 mile buffer shall be established around each nest and CDFG will be notified within 24 hours of identifying the active nest. Routine monitoring, as directed by CDFG, of these nests will be required, and the buffer zones may need to be enlarged if it appears that project-related activities are or could be causing stress to nesting birds and/or their eggs/young.

   MITIGATION MONITORING BIO-02: Prior to ground disturbance or vegetation removal, conduct a pre-construction meeting to brief all contractors and workers regarding:

   a. Timing for tree and vegetation removal.

   b. Verifying that a qualified biologist has completed pre-construction nesting bird surveys.

c. Provide information to onsite workers to look for and recognize Swainson's hawk, bald eagles, white-tailed kites and other special status birds and their nests to avoid accidental direct impacts (i.e., "take") by removing trees or bushes containing active nests.

d. Measures to avoid impacts to nesting birds will be implemented by workers and include delineating and adhering to buffer zones.

e. Other conditions necessary to minimize and avoid project impacts.

(Responsible Entity: Friends of the Tuolumne)

3. **MITIGATION MEASURE BIO-03.** When feasible, ground disturbance or construction activities shall occur between February 1st and August 30th to avoid the general nesting season for raptors and other birds. In the event that ground disturbance or construction activities must occur during the avian nesting season (between February 1st and August 30th)' nesting bird surveys shall be conducted by a qualified biologist no more than 30 days before initiating ground disturbance or construction activities to verify that no nesting sites will be impacted.

   If active nests are found during the required nesting bird surveys or through other means, a minimum 100-foot buffer zone shall be established around all active nests, and this buffer will remain around each active nest until a qualified biologist has determined that the young have fledged. If a nesting Swainson's hawk, bald eagle or white-tailed kite is identified on-site or within 0.5 miles of the construction site, a minimum 0.25 mile buffer shall be established around each nest and CDFG will be notified within 24 hours of identifying the active nest. Routine monitoring, as directed by CDFG, of these nests will be required, and the buffer zones may need to be enlarged if it appears that project-related activities are or could be causing stress to nesting birds and/or their eggs/young.

   MITIGATION MONITORING BIO-03: Conduct a pre-construction meeting to brief all contractors and workers prior to commencement of ground disturbance and construction activities regarding:

   a. Timing for ground disturbance and construction activities.

   b. Verifying that a qualified biologist has completed pre-construction nesting bird surveys.

   c. Provide information to onsite workers to look for and recognize Swainson's hawk, bald eagles, white-tailed kites and other special status birds and their nests to avoid accidental direct impacts (i.e., "take") by disturbing nesting activities with ground disturbance or construction encroachment.

   d. Measures to avoid impacts to nesting birds will be implemented by workers and include delineating and adhering to buffer zones.

   e. Other conditions necessary to minimize and avoid project impacts.

   (Responsible Entity: Friends of the Tuolumne)

4. **MITIGATION MEASURE BIO-04:** A qualified biologist shall conduct a visual pre-construction survey for western pond turtles and potential turtle nesting sites no more than 30 days prior to moving equipment on site or initiating ground disturbance activities. If a turtle nest is found within an area proposed for disturbance, then a 50 foot buffer area shall be established to protect the nest.

   MITIGATION MONITORING BIO-04: Prior to moving equipment on site or initiating ground or vegetation disturbance, whichever will occur first, conduct a pre-construction meeting to brief all contractors and workers regarding:

   a. Verifying that a qualified biologist has completed pre-construction surveys for western pond turtles and that survey results were negative or other provisions as identified in the mitigation measure have been put into place. Minimum 50-foot buffer zones around all turtle nests will be established and clearly delineated. Include contact information for the project biologist and for the CDFG to the project contractors.

   b. Provide information to onsite workers to recognize and look for the turtles moving about the project site to avoid accidental direct impacts (i.e., "take") to one or more individual western pond turtles (e.g., driving over turtles with construction equipment as turtles cross roadways or the active construction site).

   c. Ensure that turtles can escape from the steep-walled sedimentation pits by providing ramps or other escape routes.

   d. Allowing turtles to leave a roadway or construction zone before continuing work.

   e. Observing a 15 mph speed limit for all vehicles and construction equipment.

   (Responsible Entity: Friends of the Tuolumne)

5. **MITIGATION MEASURE BIO-05.** Erect brightly colored temporary fencing (e.g., safety fencing) in the following areas:

   a. 20 feet from the outer edge of the dripline of elderberry shrub "K" (Figure 6). No work is planned and no work shall occur within 100 feet of the driplines of any of the remaining elderberry shrubs. (See Appendix C, See also MM BIO-08)

   b. Prior to moving any equipment through the eastern portion of the project site; elderberry bushes located within 100 feet of any construction or excavation activities shall be fenced with bright orange safety fending (or similar) prior to commencing work in the vicinity.

   c. Temporary fencing shall be maintained throughout project construction and restoration activities.

   MITIGATION MONITORING BIO-05: Prior to ground or vegetation disturbance, whichever will occur first, conduct a pre-construction meeting to brief all contractors and workers regarding best management practices to protect water quality.

   a. Requirements for erecting and maintaining fencing and establishing a follow-up meeting to confirm that all on-site elderberries and elderberries located within 100 feet of the

project boundaries have been flagged with brightly colored flagging to ensure that accidental disturbance of elderberries does not occur. (See also **MM BIO-08**)

b. Other conditions necessary to minimize and avoid project impacts.

(Responsible Entity: Friends of the Tuolumne)

6. **MITIGATION MEASURE BIO-06.** Brush or other vegetation removed to facilitate access to the river for sediment enhancement shall be reused in brush piles for bird habitat, to the maximum extent feasible. Prior to burning any remaining brush on site; the applicant shall secure a permit, or waiver, for agricultural burning, from the San Joaquin Valley Air Pollution Control District. (AAPCD Rule 4103)

   MITIGATION MONITORING BIO-06: Prior to ground or vegetation disturbance, whichever will occur first, conduct a pre-construction meeting to brief all contractors and workers regarding best management practices to protect water quality.

   a. The disposition of brush to be retained (for bird habitat) and to be burned.

   b. Other conditions necessary to minimize and avoid project impacts.

   (Responsible Entity: Friends of the Tuolumne)

7. **MITIGATION MEASURE BIO-07.** All gravels shall be cleaned before being placed in the river. The project proponents initially will clean gravels using both wet-washing and dry-screening techniques. The more effective of the two options will be implemented for the majority of the project. For wet-washing, (and potentially for dry-screening which will employ mist screen above/through the dust when heavy dust is generated by the screen plant in accordance with SJVUAPCD regulations), water shall be obtained from the river. The pump hose for water extraction shall be fitted with a NMFS-approved screen sufficient to exclude juvenile fish. Alternatively, water may be pumped from on-site ponds using the same NMFS approved screening and velocity reduction methods. Runoff from all gravel washing activities shall be contained within a sediment basin. Runoff will be allowed to percolate into the ground below the sediment basin. It is anticipated that some water will be pumped from the river even with the use of dry-screening to implement dust-control measures, therefore, this measure is anticipated for either wet-washing or dry-screening gravels.

   MITIGATION MONITORING BIO-07: Prior to ground or vegetation disturbance, whichever will occur first, conduct a pre-construction meeting to brief all contractors and workers regarding best management practices to protect water quality.

   a. Gravel cleaning and runoff requirements in accordance with BIO-07 and to confirm the location(s) of sediment basins.

   b. Other conditions necessary to minimize and avoid project impacts.

   (Responsible Entity: Friends of the Tuolumne)

8. **MITIGATION MEASURE BIO-08.** All elderberry shrubs located on the project site (**Appendix C, Figure 6**) shall be retained on the project site.

a. No disturbance shall occur within 20 feet of the outer drip line of the elderberry shrub "K" (i.e., no encroachment will occur closer than the edge of the existing traveled roadway) (**Figure 6**). During the flight period of the beetle (March 15-June 15); no construction work will occur within 100 feet of the dripline of any elderberry shrub (including "Shrub "K"). No disturbance shall occur within 100 feet of the outer dripline of remaining elderberry shrubs. See also **MM BIO-05.**

b. No insecticides, no herbicides, no fertilizers or other chemicals that might harm the beetle or its host plant shall be used within 100 feet of any elderberry bush.

MITIGATION MONITORING BIO-08: Prior to ground or vegetation disturbance, whichever will occur first, conduct a pre-construction meeting to brief all contractors and workers regarding best management practices to protect water quality.

a. Preservation of the on-site elderberry shrubs and prohibition against insecticides, herbicides and fertilizers

b. Verification that temporary safety fencing has been erected around the on-site elderberry shrubs (**Figure 6**) – See also **MM BIO-05**.

(Responsible Entity: Friends of the Tuolumne)

9. MITIGATION MEASURE BIO-09: During Project construction:

a. Equipment and vehicles shall not exceed a speed limit of 15 mph within the project boundaries to avoid potential impacts to wildlife.

b. To prevent inadvertent entrapment of wildlife during the construction phase of a project; all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps with a 3:1 slope constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. Similarly, all construction materials and equipment should be inspected each morning before use to confirm absence of wildlife. If wildlife does not escape on its own (or is injured), then the CDFG shall be contacted (559 243-4005) to assist in freeing the animal.

c. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in closed containers and removed at least three times a week from the project site.

MITIGATION MONITORING BIO-09: Prior to ground or vegetation disturbance, whichever will occur first, conduct a pre-construction meeting to brief all contractors and workers regarding best management practices to protect water quality.

a. Addressing vehicle speeds, wildlife entrapment, trash clean-up, and providing contact information for the project biologist and CDFG.

b. Other conditions necessary to minimize and avoid project impacts.

(Responsible Entity: Friends of the Tuolumne)

10. **MITIGATION MEASURE BIO-10:** Implement the following provisions to reduce impacts to water quality.

    Prior to site disturbance:

    a. Prepare a spill response plan to address the appropriate methods for containing accidental spills of toxic materials (e.g., engine oils).

    Throughout Project Construction:

    a. Removal of mature trees and shrubs shall be limited to areas indicated on the project site plan as necessary to access new gravel bars to be created or enhanced for fish habitat restoration along the river on the project site in accordance with the project site plan (**Figures 4&5)**

    b. All gravel processing areas (washing, sorting, screening, stockpiling) shall occur a minimum of 500 feet from the river channel. As noted, the project proponents initially will clean gravels using both wet-washing and dry-screening techniques for comparison. The more effective of the two options will be implemented for the majority of the project.

    c. Storing or washing equipment, vehicles or construction materials shall not occur within 500 feet of the river or pond areas.

    d. Equipment refueling and maintenance shall occur outside of the floodplain.

    e. Stream crossings and pond crossings shall be limited to those areas identified on the project site plan (**Figures 4&5**).

    f. All gravels shall be cleaned before being placed in the river. The project proponents initially will clean gravels using both wet-washing and dry-screening techniques for comparison. The more effective of the two options will be implemented for the majority of the project. For wet-washing, (and potentially for dry-screening which will employ a mist screen above/through the dust when heavy dust is generated by the screen plant in accordance with SJVAPCD regulations), water shall be obtained from the river. The pump hose for water extraction shall be fitted with a NMFS-approved screen sufficient to exclude juvenile fish. Alternatively, water may be pumped from on-site ponds using the same NMFS approved screening and velocity reduction methods. Runoff from all gravel washing activities shall be contained within a sediment basin. Runoff will be allowed to percolate into the ground below the sediment basin.

    g. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in closed containers and removed at least every three days from the project site.

    h. To avoid the potential for introduction of invasive species such as New Zealand mudsnails (*Potamopygus antipodarum*) into the Tuolumne River or Mud Slough, all equipment will be steam cleaned prior to use on the project and immediately after the work is completed and before being used in other waterbodies.

MITIGATION MONITORING BIO-10: Prior to ground or vegetation disturbance, whichever will occur first, conduct a pre-construction meeting to brief all contractors and workers regarding best management practices to protect water quality.

11. **MITIGATION MEASURE BIO-11**: An erosion and sediment control plan shall be implemented to prevent impacts outside of the project construction area. Bank, landscape excavation areas, and all other disturbed areas (including road access points to the river used to deposit gravels for enhancement or construction of gravel bars) shall be stabilized as soon as possible or no later than October 15th of the construction year. Disturbed areas shall be stabilized using tightly woven natural fiver netting or similar material to ensure sensitive wildlife (such as western pond turtles) cannot be trapped. No plastic monofilament matting will be used for erosion control.

    Revegetation shall be in accordance with the project Revegetation Plan (**Appendix B**). Only certified weed free native grass seed will be used for reseeding.

    MITIGATION MONITORING BIO-11: Prior to moving equipment on-site, ground disturbance, construction or excavation activities a pre-construction meeting with contractors, equipment operators shall be conducted to review this project requirement

    (Responsible Entity: Friends of the Tuolumne)

12. **BIO-12.** Prior to commencing ground disturbance, protection buffers as specified in the table below shall be established outside of the dripline around all trees to be retained that are located in proximity to construction areas (e.g., roadways, borrow areas). Within one year of soil disturbance, revegetation shall occur. Fines segregated from the gravel during screening will be placed in the excavated areas to improve substrate for planting and recruitment. Revegetation for the current project includes the following:

Tree Species to be Mitigated if Removed	**Tree protection measures for Trees to be Retained/a/**	**Tree size requiring mitigation**	**Replanting Requirement/b/, /c/**
Fremont cottonwood *Populus fremontii*	Protection buffers will be 30-ft (9.1-m) from the outer edge of the dripline	Per **Appendix B**	Per **Appendix B**
Willows *Salix* spp.	Protection buffers 10-ft (3-m) from the outer edge of the dripline		
Poplar, alder, ash, other			
Oaks *Quercus* spp.	Protection buffers 10-ft (3-m) from the outer edge of the dripline	3 in, or greater dbh. (inventory shall distinguish between trees 3"or greater and those over 5")	3-5" dbh – same species 3:1 >5" dbh – same species 5:1 Planted in excavated areas and/or on-site oak tree planting area (See **Appendix B**)

a. Protection buffers as established above shall be established by installing brightly colored temporary safety fencing and/ or installing brightly-colored flagged stakes prior to any site disturbances within areas proposed for site disturbance and as allowed by the dense cobble surface and topography.

b. Oaks tree replacement shall be accomplished using oak saplings grown from local acorns which should be planted during the winter dormancy period in the nearest suitable location to the area where they were removed. Riparian trees (i.e., willow, cottonwood, poplar, alder, ash, etc.) and shrubs also should be planted in the nearest suitable location to the area where they were removed. Alternative planting times are permissible; however, irrigation is required for tree planting outside of the rainy season.

c. Replanted trees shall achieve a 70% survival rate for at least three years from installation (see project conditions for monitoring provisions)

MITIGATION MONITORING BIO-12
In accordance with grant provisions, grant reporting shall include the results of an inventory of new plants (valley oaks and riparian plantings) and indicate their survival rate. Should survival rates fall below 70% within a three year time span, Friends of the Tuolumne shall add survival shortfalls to replanting in subsequent years as necessary to achieve a 70% survival rate.

(Responsible Entity: Friends of the Tuolumne)

13. **BIO-13.** Prior to ground or vegetation disturbance, whichever occurs first; obtain the following permits, authorizations, certifications, or agreements:

a. Authorization under federal Clean Water Act Section 404

b. A federal Clean Water Act Section 401 Water Quality Certification

c. A Lake or Streambed Alteration Agreement pursuant to Section 1602 of the California Fish and Game Code

d. Central Valley Flood Protection Board (CVFPB) Encroachment Permit (CA Code of Regulations, Title 23, Division 1, Article 3, Section 6)

e. Grading Permit, or waiver, from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060)

f. Prepare, submit and secure approval for a Dust Control Plan from the San Joaquin Valley Air Pollution Control District. The Dust Control Plan should include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities and haul roads. (APCD, Regulation VIII)

g. Secure an Authorization to Construct permit, or waiver, from the San Joaquin Valley Air Pollution Control District (APCD Rule 2010)

h. Complete appropriate consultations with the U.S. Fish and Wildlife Service/NOAA Fisheries

i. Acquire an Encroachment Permit from the California State Lands Commission (Public Resources Code Section 6221)

j. Conditional Use Permit, or waiver, for mineral extraction operations from the Stanislaus County Community Development Department (Stanislaus County Code Section 21.20.030)

14. **BIO-14.** During Project Construction & Enhancement Activities, all work shall be conducted in accordance with the conditions established pursuant to the following permits, consultations and agreements:

a. Authorization under federal Clean Water Act Section 404 (CWA, Section 404)

b. Federal Clean Water Act Section 401 Water Quality Certification (CWA, Section 401)

c. Lake or Streambed Alteration Agreement pursuant to Section 1602 of the California Fish and Game Code (CA Fish and Game Code, 1602 et seq.)

d. Central Valley Flood Protection Board (CVFPB) Encroachment Permit (CA Code of Regulations, Title 23, Division 1, Article 3, Section 6)

e. Grading Permit, or waiver, from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060)

f. Dust Control Plan from the San Joaquin Valley Air Pollution Control District. The Dust Control Plan should include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities and haul roads. (APCD, Regulation VIII)

g. Authorization to Construct permit, or waiver, from the San Joaquin Valley Air Pollution Control District (APCD Rule 2010)

h. Consultations with the U.S. Fish and Wildlife Service/NOAA Fisheries

i. Encroachment Permit from the California State Lands Commission (Public Resources Code Section 6221)

j. Conditional Use Permit, or waiver, for mineral extraction operations from the Stanislaus County Community Development Department (Stanislaus County Code Section 21.20.030)

V. CULTURAL RESOURCES

An archaeological study conducted by Davis-King & Associates (Davis-King, 2004), and previously incorporated by reference, revealed no known archaeological or historic era resources that could be affected by the project as proposed.

Davis-King & Associates consulted with local Native American tribes, local historical societies and conducted pre-field archival research at the Central California Information Center in Turlock. Resources were evaluated in accordance with Section 15064.5 of the California Environmental Quality Act, Section 5024 of the California Public Resources Code; the California Register of Historical Resources (CRHR), the National Historic Preservation Act (16 USC 470) and 36Code of Federal Regulations (CFR) 800.4 (a) (d) (1). The study concludes that no significant cultural resources, historic or pre-historic, were identified

on the surface of the project site and no prehistoric or historic properties would be affected pursuant to the preceding criteria.

The study notes that a river floodplain was not favored for important pre-historic sites and that decades of surface disturbance on the site, as well as the seasonal flooding, have left little opportunity for pre-historic or historic era artifacts to remain on the site. The study further states that the project site was dredged, mined and otherwise disturbed during the past 100 years and no significant cultural resources (historic or pre-historic) were identified on the surface of the project site. Only isolated dredger scrap metal was found on the project site. Prior mining activities were done to extract gold, cobbles and gravel from the project site.

However, given the proximity of the site to the river and acorn crops, the potential for subsurface pre-historic resources, although slight, remains. Grading and excavation in conjunction with the project (e.g., excavation to extract cobbles and coarse gravels, re-contouring the flood plain, constructing a sediment pond, stockpiling, screening, sorting, and cleaning gravels; and construction of a new on-site haul road to access to the new gravel enhancement areas on the river) could uncover subsurface resources. Therefore, in accordance with the project description and pursuant to Section 15064.5 of the State CEQA Guidelines; if cultural resources are discovered on the project site during excavation activities, then the work in the area of the discovered cultural resource will stop until the resource has been properly evaluated by a qualified archaeologist.

a) "Will the project cause a substantial adverse change in the significance of a historical resource as defined in the Government Code, State CEQA Guidelines Section 15064.5?"

No impact expected. See preceding paragraphs.

b) "Would the project cause a substantial adverse change in the significance of an archaeological resource, pursuant to Government Code, Section15064.5 of the State CEQA Guidelines"

No impact expected. See preceding paragraphs.

c) "Could the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?"

No Impact is expected to paleontological resources or unique geologic features from the project as proposed. There are no unique geological features known on the site. Paleontological resources are unknown in this area and there is no surface evidence that such resources could exist.

d) "Disturb any human remains, including those interred outside of formal cemeteries?"

No impact is expected to human remains from the project as proposed, based on *Davis-King, 2004*, which states that the river floodplain is not a typical burial site for Native Americans. Based on these findings, no adverse impacts are anticipated to any human remains with implementation of the proposed project, including project conditions, mitigation measures and project design features which address discovery of unanticipated resources.

Conditions, Mitigation Measures, and Project Design Features Addressing:
Cultural Resources

1. **MITIGATION MEASURE CULT-01:** All contractors and equipment operators shall be instructed to watch for potential archeological artifacts (including glass pieces, ceramic pieces, square nails and human remains), pursuant to Section 106 of the National Historic

Preservation Act. If a potential cultural resource is discovered during the activities authorized by the approval of this project, the person in possession of the parcel and all persons conducting any activity authorized by this project approval shall comply with the following provisions:

a. The person discovering the cultural resource shall notify the professional archaeologist by telephone within 4 hours of the discovery or the next working day if their office is closed. Project Archaeologist: Shelly Davis-King, phone: (209) 928-3443.

b. When the cultural resource is located outside the area of disturbance, the professional archaeologist shall be allowed to photodocument and record the resource and construction activities may continue during this process. The area of disturbance includes grading and vegetation removal, plus 33 feet (10 meters).

c. When the cultural resource is located within the area of disturbance, all activities that may impact the resource shall cease immediately upon discovery of the resource. All activity that does not affect the cultural resource as determined by the consulting archaeologist may continue. A qualified archaeological professional, such as an archaeologist or an historian, shall be allowed to conduct an evaluative survey to evaluate the significance of the cultural resource.

d. When the cultural resource is determined to not be significant, the qualified professional archaeologist shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the professional archaeologist

e. When a resource is determined to be significant, the resource shall be avoided with said resource having boundaries established around its perimeter by a qualified professional archaeologist or historian or a cultural resource management plan shall be prepared by a qualified professional to establish measures formulated and implemented in accordance with Sections 21083.2 and 21084.1 of the California Environmental Quality Act (CEQA) to address the effects of construction on the resource. The qualified professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the professional archaeologist. All further activity authorized by this by the approval of this project shall comply with any cultural resources management plan required.

(Note: A cultural resource is any building, structure, object, site, district, or other item of cultural, social, religious, economic, political, scientific, agricultural, educational, military, engineering or architectural significance to the citizens of Stanislaus County, the State of California, or the nation which is 50 years of age or older or has been listed on the National Register of Historic Places, the California Register of Cultural Resources, or a County register of cultural resources.)

MITIGATION MONITORING PROVISION: Prior to moving equipment on-site, ground disturbance, construction or excavation activities, conduct a pre-construction meeting with contractors, equipment operators and other individuals involved in the project to review these project requirements

(Responsible Entity: Friends of the Tuolumne)

2. **MITIGATION MEASURE CULT-02.** If human remains are discovered during subsurface excavations on the project site, no further disturbance shall occur until the County Coroner has made the necessary determination as to the origin and disposition of the remains, pursuant to Public Resources Code, Section 5097.98 and State Health and Safety Code, Section 7050.5. [i.e., If human remains are encountered, work must stop and the County Coroner shall be notified within 48 hours]. There shall be no further disturbance to the area where the remains are found. If the remains are Native American, the coroner must notify the Native American Heritage Commission within 24 hours. The NAHC will immediately notify the Most Likely Descendant (Public Resources Code 5097.98)

VI. GEOLOGY AND SOILS

On-site soils are classified as dredge and mine tailings (DI). The project area is a river floodplain comprised primarily of barren and unproductive silty sand, coarse sediments, gravel and cobbles. The soils on the site are unsuited for timber production, and are of marginal value for rangeland uses. A sediment pond will be constructed at the wash site (unless gravel cleaning will be accomplished only through dry screening and no water will be used to implement dust-control measures), adjacent to the stockpile area, to control any sediment runoff from the project site.

Excavation has been planned to avoid removal of trees and shrubs on the project site, excepting areas necessary to access new gravel bars to be created or enhanced along the river on the project site. The retention of trees and shrubs will help to secure the soils and reduce the potential for erosion impacts on water quality. Revegetation for riparian habitat restoration and enhancement is also proposed for disturbed areas on the project site to improve habitat for fish and wildlife. The revegetation will also help to reduce impacts associated with erosion to a level of less than significant.

a) "Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42."

No Impacts to public safety from fault rupture activities are expected from the project as proposed. The project site is located in Seismic Zone III, as is much of the Central Valley and the Sierra Nevada Foothills. There are no known earthquake faults located on or near the project site. The nearest major faults are the Bear Mountain and Melones faults, located several miles east of the project site. Pursuant to the Stanislaus County General Plan Background Document (Page 200); the State Department of Mines and Geology indicates that ground shaking along these faults could produce shaking consistent with an intensity of VI or VII on the Modified Mercalli Scale. Given the distance of the site from the faults and the lack of structures proposed for the project; the proposed project is not anticipated to be affected by a fault rupture zone.

ii) "Strong seismic ground shaking?"

See preceding paragraph.

iii) "Seismic-related ground failure, including liquefaction?"

No Impacts from seismic-related ground failure are expected from the project as proposed. Landslides, mudslides and rock falls are unlikely except in association with the steep banks of the river channels. In these locations, fine sands and high groundwater levels could combine with ground shaking resulting in liquefaction. This potential for liquefaction exists with or without the proposed project. However, no structures or public facilities are proposed on the project site, which could have enticed the public to the site or injured the public on the site.

iv) "Landslides?"

No Impacts from landslides are expected from the project as proposed. Landslides, mudslides and rock falls are unlikely except in association with the steep banks of the river channels. In these locations, fine sands and steep banks could combine with ground shaking to result in small landslides. This potential for liquefaction exists with or without the proposed project. However, no structures or public facilities are proposed on the project site, which could have enticed the public to the site or injured the public on the site.

b) "Result in substantial soil erosion or the loss of topsoil?"

No impacts are anticipated. Due to dredging activities several decades ago; the project site has very little topsoil, hence the project has minimal potential for loss of topsoil. Coarse sediments (i.e., sediments between 8 millimeters and 130 millimeters in size) to be excavated on site and introduced into the Tuolumne River are large enough that they will not be easily eroded. Excavation areas will be limited to areas with slopes of less than a 10 percent gradient to further reduce potential erosion. Re-contouring the floodplain after coarse sediment excavation will result in slopes with a 2:1 ratio to ensure slope stability and to prevent erosion in those areas where the floodplain will be day-lighted back to the existing slopes.

All materials excavated from the project site will be used on the project site. No excavated materials will be transported or sold off the project site. Excavated gravels and cobbles are proposed to be temporarily stockpiled, screened and sorted for size, then cleaned prior to placement in the river. Sediments will be cleaned (wet-washed or dry-screened) prior to placement in the river channel, to assure no degradation in water quality will occur in the river. River water is proposed to be pumped temporarily from the river, for the cobble and gravel washing process (It is anticipated that some water will be pumped from the river even with the use of dry-screening to implement dust-control measures). A sediment pond will be constructed at the wash site, adjacent to the stockpile area, to control any sediment runoff from the project site.

c) "Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?"

No impacts from unstable soils are expected from the project as proposed. Landslides, mudslides, subsidence and collapse are unlikely because no unstable soil areas were identified in this relatively flat river flood plain. In the locations with fine sands and high groundwater levels, ground shaking could result in liquefaction. This potential for liquefaction exists with or without the proposed project.

d) "Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?"

No impacts from expansive soils are expected from the project as proposed, because no expansive soils are located on the project site.

e) "Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?"

No Impacts from septic systems or waste water are expected from the project as proposed, because no septic tanks or alternative waste water disposal systems for the disposal of waste water are proposed for this project.

Conditions, Mitigation Measures, and Project Design Features Addressing Geology & Soils

1. **MITIGATION MEASURE GEO-01:** Obtain the following permits, authorizations, certifications, or agreements:

   a. Authorization under federal Clean Water Act Section 404

   b. A federal Clean Water Act Section 401 Water Quality Certification

   c. Grading Permit, or waiver, from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060)

   d. Prepare, submit and secure approval for a Dust Control Plan from the San Joaquin Valley Air Pollution Control District. The Dust Control Plan should include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities and haul roads. (APCD, Regulation VIII)

   (Responsible Entity: Friends of the Tuolumne)

2. **MITIGATION MEASURE GEO-02:** Removal of mature trees and shrubs shall be limited to areas indicated on the project site plan as necessary to access new gravel bars to be created or enhanced for fish habitat restoration along the river on the project site in accordance with the project site plan (**Figures 4&5).**

   MITIGATION MONITORING GEO-02: Prior to moving equipment on-site, ground disturbance, construction or excavation activities; conduct a pre-construction meeting with contractors, equipment operators and other individuals involved in the project reviewing these project requirements

   (Responsible Entity: Friends of the Tuolumne)

3. **MITIGATION MEASURE GEO-03:** Stabilize landscape excavation areas and all other disturbed areas (including road access points to the river used to deposit gravels for enhancement or construction of gravel bars) as soon as possible or no later than by October 15th of the construction year. Revegetation shall be in accordance with the project Revegetation Plan (**Appendix B**). Only certified weed-free seed will be used for reseeding. Recommended seeds and plants which may successfully be used to stabilize disturbed soils, which compete with or inhibit the growth of star-thistle, and which are appropriate to the project conditions including but not limited to: Zorro annual fescue, perennial ryegrass, wild oats or other native grasses, or any CDFG approved erosion control native seed mixtures appropriate for use in Central Valley nonnative annual grasslands.

MITIGATION MONITORING GEO-03: Prior to moving equipment on-site, ground disturbance, construction or excavation activities; conduct a pre-construction meeting with contractors, equipment operators and other individuals involved in the project to review these project requirements

(Responsible Entity: Friends of the Tuolumne)

VII. HAZARDS AND HAZARDOUS MATERIALS

a) "Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?"
Mercury was used, historically, in some mining operations, including those involving dredgers. While mercury is not routinely detected within the relatively large-sized cobbles such as those found on the Bobcat Flat site; mercury has been detected in some sand pockets within areas which have been dredged (Mesick, 2005). To avoid the potential for introducing mercury into the river; the gravel wash water area shall be located more than 500± feet from the river and shall include a sediment basin for all wash water to be collected and percolated through the ground. This mitigation measure is expected to avoid the introduction of mercury into the river resulting in less than significant impact with respect to hazardous materials. The Central Valley Regional Water Control Board has reviewed this proposal and states that mercury monitoring will not be required for this project based on the preceding (Day, 2004). It is anticipated that some water will be pumped from the river even with the use of dry-screening as necessary to implement dust-control measures—therefore, any runoff from gravel cleaning activities will include these provisions. Dry screening for gravel cleaning (without the use of rinse water) will use screens of sufficient size to eliminate sands with the potential to contain mercury.

b) "Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?"
See preceding.

c) "Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?"
No impacts from hazards or hazardous materials are expected from the project as proposed, because the proposed project will not create hazardous emissions, does not involve handling of hazardous or acutely hazardous materials, substances or wastes. Therefore, no potential impacts to area properties (including any proposed school within one-quarter mile) are anticipated.

d) "Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?"
The following hazardous materials references were reviewed for records of potential hazardous materials sites in the vicinity: California Integrated Waste Management Board Solid Waste Information System (SWIS); United States Environmental Protection Agency Resource Conservation and Recovery Act (RCRAInfo); and the Comprehensive Environmental Responsibility, Compensation and Liability Information System (CERCLIS/Superfund) National Priorities List (NPL) Sites. No hazardous material sites were identified on or in the immediate vicinity of the project site. Therefore, no impacts from hazards or hazardous materials are expected from the project as proposed, based on the finding that the site is not listed on these lists of hazardous materials sites.

e) "For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?"

Oakdale Municipal Airport is located 16± miles northwest of the site and Turlock Airport is located 20± miles southwest of the project site. No aviation safety hazards are expected from the project as proposed, because the site is outside the designated clear zone for departures and approaches to the nearest airports.

f) "For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?"

See preceding.

g) "Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?"

Stanislaus County has an adopted emergency response plan. Development on this site will have no impact on any emergency response plan and will not interfere with the County's ability to respond to any emergency requiring evacuation of residents in this area because it is not identified as an evacuation route or staging area during emergencies.

h) "Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?"

The project proposes no structures in this very rural agricultural area. Since no structures will be occupied by people on the project site, no significant risk from wildland fires will be created by approval of the proposed project. Removal of non-native vegetation in the areas to be excavated will assist in actually reducing any wildland fire hazard on the project site.

Conditions, Mitigation Measures, and Project Design Features Addressing Hazards and Hazardous Materials

1. **MITIGATION MEASURE HAZ-01:** The gravel wash water area (for wet-washing) shall be located more than 500± feet from the river and shall include a sediment basin for the collection of all wash water to be collected and percolated through the ground to avoid the introduction of mercury into the river. Alternatively, if dry-screening is used, it is anticipated that some water will be pumped from the river to implement dust-control measures. Any runoff associated with gravel will include these provisions. Dry screening for gravel cleaning (without the use of rinse water) will use screens of sufficient size to eliminate sands with the potential to contain mercury.

   MITIGATION MONITORING HAZ-01: Prior to moving equipment on-site, ground disturbance, construction or excavation activities; conduct a pre-construction meeting with contractors, equipment operators and other individuals involved in the project reviewing this project requirement.

   (Responsible Entity: Friends of the Tuolumne)

2. **MITIGATION MEASURE HAZ-02:** Implement the following provision to reduce impacts to water quality. Prior to site disturbance, prepare a spill response plan to address the appropriate methods for containing accidental spills of toxic materials (e.g., engine oils).

MITIGATION MONITORING HAZ-02: Prior to moving equipment on-site, ground disturbance, construction or excavation activities; conduct a pre-construction meeting with contractors, equipment operators and other individuals involved in the project reviewing this project requirement

(Responsible Entity: Friends of the Tuolumne)

VIII. HYDROLOGY AND WATER QUALITY

The Central Valley Flood Protection Board (CVFPB) reviewed the 2010 Phase II project and provided the following comments:

> The Tuolumne River and Duck Slough are within the jurisdiction of the CVFPB (formerly the Reclamation Board). A Board permit is required.

This regulatory condition of project approval has been included in **Appendix A.** The Board asked to be kept appraised of the project status.

a) "Would the project violate any water quality standards or waste discharge requirements?"

The project as proposed will excavate and fill material in the Tuolumne River and its floodplain. The proposed work shall be conducted in compliance with the following permits:

1) Authorization under federal Clean Water Act Section 404

2) A federal Clean Water Act Section 401 Water Quality Certification

3) A Lake or Streambed Alteration Agreement pursuant to Section 1602 of the California Fish and Game Code

4) Central Valley Flood Protection Board (CVFPB) Encroachment Permit (CA Code of Regulations, Title 23, Division 1, Article 3, Section 6)

5) Grading Permit (or waiver) from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060)

The project would have less than a significant impact on water quality, because work done in compliance with these permits will not create a significant impact on water quality. In addition, as described in paragraphs "b," "c," and "f," additional project mitigation measures are included to reduce impacts to water quality to a level of less-than-significant.

b) "Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level, which would not support existing land uses or planned uses for which permits have been granted)?"

No impacts to groundwater are expected from the project as proposed, because on-site water for cleaning coarse sediments will be pumped from the river (water use is anticipated for wet-washing gravels with reduced water use for dust control in conjunction with dry screening gravels). No groundwater will be used for the proposed project. The wash water will recharge

the ground water through a sediment basin to be constructed on the project site. See also paragraphs "c" and "f."

c) "Substantially alter the existing drainage pattern of the site or area, including through the alteration of the coarse of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?"

Primary project goals are to alter the floodplain on the project site to restore and enhance normal floodplain functions and to restore and enhance fish and wildlife habitat in and adjacent (e.g., Duck Slough) to the Tuolumne River. The project as proposed will excavate material from the floodplain and reconnect Duck Slough with the main Tuolumne River channel. Some of these coarse sediments will be used to create and enhance gravel bars in the Tuolumne River and Duck Slough. For Duck Slough, reconnection with the river and the introduction of gravel bars will enhance salmonid spawning and rearing habitat, improve duck habitat, reduce predatory fish (bass) habitat, provide winter rearing habitat for fry and juvenile salmonids, reduce mosquito habitat, reduce stranding threats to salmonids and increase foraging opportunities for out migrating salmonids during spring dam releases.

Project conditions, mitigation measures and project design features included to prevent substantial erosion or siltation on-site or off-site include revegetation of excavated areas in accordance with the revegetation plan (**Appendix B**), hydro-seeding before the rainy season, and use of a sediment basin to collected gravel wash water (if wet-washing is used or if runoff is generated in conjunction with dust control efforts associated with dry-screening) which will then percolate into the ground. These provisions are anticipated to reduce the potential impacts to water quality of the proposed project to a level of less than significant.

See also paragraphs "b" and "f."

d) "Substantially alter the existing drainage pattern of the site or area, including through the alteration of the coarse of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?"

The project will excavate coarse sediments in the floodplain to be used as fill material in the Tuolumne River, thus altering existing drainage patterns (which were previously disrupted by historical dredging activities). Project design does not include the introduction of any impervious surfaces that can speed water runoff from the site and will not decrease the size of the river flood plain to reduce flood storage capacity. Therefore, no off-site impacts from flooding rates or amounts are expected as a result of this project. The proposed re-contouring of the floodplain will allow the project site to better handle high water flood flows on the project site.

e) "Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?"

No storm water drainage system exists in this rural agricultural area. Drainage occurs in natural channels only. The project would have less than a significant impact on runoff water quality or quantity, because all work will be done in compliance with the project provisions listed above and in compliance with permits issued by the State and Federal jurisdictional agencies.

f) "Otherwise substantially degrade water quality?"

Construction activities could result in degraded water quality, primarily resulting from erosion occurring in conjunction with gravel extraction and excavations (including reconnecting Duck Slough to the Tuolumne River main channel. Paragraphs "b" and "c" address primary erosion

control plans. To minimize remaining impacts, mitigation measures include limiting the removal of mature trees and shrubs , preparing a spill response plan to address the appropriate methods for containing accidental spills of toxic materials (e.g., engine oils), restricting gravel processing areas to 500 feet from the river channel (see also Hazardous Materials), storing and washing equipment and construction materials at least 500 feet from the river channel, refueling outside of the floodplain and limiting stream and pond crossings. Proper implementation of these measures and those included in paragraphs "b" and "c" are expected to minimize impacts to water quality to a level of less-than-significant.

g) "Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?"

No impacts to housing from flood hazards are expected from the project as proposed, because no housing is proposed in conjunction with this project. The project site is vacant agricultural land, which is located in a Flood Zone A, pursuant to the US Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, Community Panel # 060334 0375 A, effective August 1, 1980. Zone A is an area of 100-year flood where the base flood elevations and flood hazard factors have not been determined.

h) "Place within a 100-year flood hazard area structures which would impede or redirect flood flows?"

No impacts from structures placed in a flood hazard area are expected on the project site, because no structures are proposed to be placed within the floodplain in conjunction with this project.

i) "Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?"

No impacts to people or structures from flood hazards are expected from the project as proposed, because, although the project site is situated downstream from the La Grange Dam and Don Pedro Reservoir dam, no structures are proposed in conjunction with this project. The site is vacant agricultural land. No new levees or dams are proposed by this project. Therefore, the potential to expose people or structures to a significant risk is very low. Caltrans, District 10 office, responded on January 27, 2005 that "the project does not appear to increase traffic on State Route 132 in the project area, nor does it appear to increase stream velocity or scour potential to any state highway structure in the vicinity."

j) "Inundation by seiche, tsunami, or mudflow? "

The project as proposed would not increase any risk for inundation by seiche, tsunami, or mudflow. The planning area does not contain any bodies of water large enough to result in substantial seiches or tsunamis. The project site is vacant agricultural land on a relatively flat river floodplain. A major earthquake affecting Don Pedro reservoir on the Tuolumne River could result in a seiche or mudflow generated upstream of the project site and result in substantial flooding downstream. However, the proposed project does not include structures or attract populations which could be threatened by such flooding.

Conditions, Mitigation Measures, and Project Design Features Addressing Hydrology & Water Quality

1. **MITIGATION MEASURE HYDRO-01:** Implement the following provisions to reduce impacts to water quality.

a. Prior to site disturbance prepare a spill response plan to address the appropriate methods for containing accidental spills of toxic materials (e.g., engine oils).

Throughout Project Construction:

b. Removal of mature trees and shrubs shall be limited to areas indicated on the project site plan as necessary to access new gravel bars to be created or enhanced for fish habitat restoration along the river on the project site in accordance with the project site plan (**Figures 4&5)**

c. All gravel processing areas (washing, sorting, screening, stockpiling) shall occur a minimum of 500 feet from the river channel. As noted, the project proponents initially will clean gravels using both wet-washing and dry-screening techniques for comparison. The more effective of the two options will be implemented for the majority of the project.

d. Storing or washing equipment, vehicles or construction materials shall not occur within 500± feet of the river or pond areas.

e. Equipment refueling and maintenance shall occur outside of the floodplain.

f. Stream crossings and pond crossings shall be limited to those areas identified on the project site plan (**Figures 4&5**).

g. All gravels shall be cleaned before being placed in the river. The project proponents initially will clean gravels using both wet-washing and dry-screening techniques for comparison. The more effective of the two options will be implemented for the majority of the project. For wet-washing, water shall be obtained from the river. Runoff from all gravel washing activities shall be contained within a sediment basin. Runoff will be allowed to percolate into the ground below the sediment basin. It is anticipated that some water will be pumped from the river even with the use of dry-screening to implement dust-control measures, therefore, this measure is anticipated for either wet-washing or dry-screening gravels.

h. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in closed containers and removed at least every three days from the project site.

MITIGATION MONITORING HYDRO-01: Prior to moving equipment on-site, ground disturbance, construction or excavation activities; conduct a pre-construction meeting with contractors, equipment operators and other individuals involved in the project to review this project requirement

(Responsible Entity: Friends of the Tuolumne)

2. **MITIGATION MEASURE HYDRO-2:** Stabilize and landscape excavation areas and all other disturbed areas (including road access points to the river used to deposit gravels for enhancement or construction of gravel bars) as soon as possible but no later than by October 15 of the construction year. Revegetation shall be in accordance with the project Revegetation Plan (**Appendix B**). Only certified weed-free seed will be used for reseeding. Recommended seeds and plants which may successfully be used to stabilize disturbed soils, which compete with or inhibit the growth of star-thistle, and which are appropriate to the project conditions including but

not limited to: Zorro annual fescue, perennial ryegrass, wild oats or other native grasses, or any CDFG erosion control native seed mixtures appropriate for use in Central Valley nonnative annual grasslands.

MITIGATION MONITORING HYDRO-02: Prior to moving equipment on-site, ground disturbance, construction or excavation activities; conduct a pre-construction meeting with contractors, equipment operators and other individuals involved in the project to review this project requirement (Responsible Entity: Friends of the Tuolumne)

3. **HYDRO-03.** Obtain the following permits, authorizations, certifications, or agreements:

    a. Authorization under federal Clean Water Act Section 404 (CWA, 404)

    b. A federal Clean Water Act Section 401 Water Quality Certification (CWA 401)

    c. Grading Permit (or waiver) from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060)

    d. Prepare, submit and secure approval for a Dust Control Plan from the San Joaquin Valley Air Pollution Control District. The Dust Control Plan should include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities and haul roads. (APCD, Regulation VIII)

IX. LAND USE AND PLANNING

The project site is vacant land, approximately 335± acres in size, with a Stanislaus County General Plan land use designation of Agriculture and is zoned A-2-40 (General Agriculture, forty acres) under the Stanislaus County Zoning Code. The A-2-40 zoning is consistent with the Agricultural General Plan land use designation, pursuant to Chapter 1 (Land Use) of the Stanislaus County General Plan. The Agricultural General Plan land use designation and the A-2-40 zoning allow for agricultural, open space and recreational land uses. The project site is contained in a Williamson Act or Land Conservation Act contract with Stanislaus County and has been grazed during portions of the year. The Williamson Act Land Conservation contract provides for open space uses, as well as agricultural uses. The existing open space and agricultural uses will not be precluded by the proposed habitat restoration project. Therefore, the project as proposed may be found consistent with the General Plan Land Use Element, with Chapter 21.20 of the Stanislaus County Zoning Code and with the Williamson Act land Conservation contract, all of which govern land uses on the project site.

a) "Would the project physically divide an established community?"
The project site is located in a rural agricultural area. No communities are located within seven highway miles of the project site. Therefore, no physical division of communities will result from the approval of the proposed project.

b) "Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?"
As noted above, this proposed project is consistent with the Stanislaus County General Plan and Zoning Code. The project as proposed will require permits and agreements with several State and

Federal regulatory agencies. These permits will be secured prior to commencement of project construction. The proposed work will be conducted in compliance with all required permits

Based on the Phase I Bobcat Flat project, a Conditional Use Permit may be required for the A-2-40 Zoning District for the proposed use pursuant to Stanislaus County Code Section 21.20.030. For Phase I, that requirement was waived by Stanislaus County. To minimize potential project delays, prior to commencing site disturbances, acquire a Conditional Use Permit, or Waiver, from the Stanislaus County Community Development Department.

c) "Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?"

No formal Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local habitat conservation plan exists in the project boundaries or the vicinity.

d) Would the project conflict with community identity?

Parcel owners within 500' of the project site were notified of the proposed project. Two responses were received. One landowner responded that all seemed "ok" and asked to be kept appraised of the project status.

One landowner expressed interest in enhancements for wood duck, river otter, loggerhead shrike, Chinook salmon, willow flycatcher, and rainbow or steelhead trout. Landowner asked to be kept appraised of the project status.

Conditions, Mitigation Measures, and Project Design Features Addressing Land Use and Planning

1. **LAND-01**. Prior to commencing site disturbances, acquire a Conditional Use Permit, or waiver, from the Stanislaus County Community Development Department (Stanislaus County Code Section 21.20.030)

X. MINERAL RESOURCES

The project site has a history of mineral extraction. It was disturbed from gold dredger and gravel extraction activities that occurred in the first half of the last century, and again in the 1960s for gravel to build nearby dams.

The current project proposes to extract 48,500± ± cubic yards of cobbles and coarse gravel on 10.3+ acres of the river floodplain. All coarse sediment materials that will be excavated from the project site will be used on the project site. No excavated materials will be transported or sold off the project site. Therefore, this project does not constitute a commercial mineral extraction project.

The California Department of Conservation, Office of Mine Reclamation reviewed the 2010 Phase II project (**Appendix F)** and states:

> If more than 1000 cubic yards of material is proposed to be taken off the site for commercial purposes, the project must comply with the Surface Mining and Reclamation Act (SMARA Public Resources Code, Section 2710, et seq.).

No material is proposed for removal for commercial purposes. No material is proposed for removal for commercial purposes. Therefore, the project remains exempt from SMARA.

a) "Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?"

The Stanislaus County General Plan identifies mineral resources of value to the county (Chapter 3, Conservation & Open Space Element; Aggregate Resource Areas of Stanislaus County – State division of Mines and Geology, Special Report 173; 1993). The project site is within an identified aggregate resource area. The project, as proposed, will extract on-site gravels—thereby using existing mineral resources consistent with the general plan. Minerals will remain on site and no structures are proposed for the project--therefore, the project will not preclude future mineral extraction activities. The land use designation for the site will remain Agricultural, which is consistent with mineral extraction activities, pursuant to Chapter 1 (Land Use; Goal one; Policy 2) and Chapter 3 (Conservation and Open Space; Goal 9, Policy 26) of the Stanislaus County General Plan.

b) "Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?"

ee preceding paragraph.

XI. NOISE

The project site is relatively quiet, with the primary source of noise being traffic on State Route 132 in the vicinity of the proposed project.

a) Would the project exposure persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?"

The project does not include construction of new structures or noise-generating facilities. The proposed project, upon completion, will continue to exist as a natural floodplain (consistent with noise standards established in Chapter 4, Figure 3 of the Stanislaus County General Plan for agricultural operations). In addition, an Authority to Construct permit (or waiver) shall be obtained from the San Joaquin Valley Air Pollution Control District. The Authority to Construct Permit ensures that equipment used is certified for compliance with noise and air quality requirements of the State of California.

b) "Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels? "

See paragraphs (a and d).

c) "A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?"

See preceding.

d) "A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?"

The proposed project could temporarily increase noise through the following activities: placing cobbles and coarse gravels into new or enhanced gravel bars; excavating cobbles and coarse gravels on site; recontouring the existing floodplain; stockpiling, screening, sorting, cleaning gravels; sediment pond construction; and constructing a new on-site haul road.

Temporary increases in noise levels during these activities could disturb adjacent neighbors. This short-term impact can be alleviated by restricting the hours of equipment operation as indicated in the project description (i.e., to daylight hours or 7:00 a.m. to 7:00 p.m.). Implementation of these project measures will ensure that the project will have neither a short nor long-term adverse impact on noise levels.

e) "For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?"

Oakdale Municipal Airport is located 16± miles northwest of the site and Turlock Airport is located 20± miles southwest of the project site. No aviation safety hazards are expected from the project as proposed, because the site is outside the designated clear zone for departures and approaches to the nearest airports

f) "For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?"

See preceding.

Conditions, Mitigation Measures, and Project Design Features Addressing Noise

1. **MITIGATION MEASURE NOISE-01:** Equipment operation; excavating, screening, gravel cleaning, road construction and gravel bar construction activities are limited to 7:00 a.m. to 7:00 p.m., daily.

   MITIGATION MONITORING NOISE-01: Prior to moving equipment on-site, ground disturbance, construction or excavation activities; conduct a pre-construction meeting with contractors, equipment operators and other individuals involved in the project to review this project requirement

   (Responsible Entity: Friends of the Tuolumne)

2. **NOISE-02.** Secure an Authority to Construct Permit from the San Joaquin Valley Air Pollution Control District (APCD Rule 2010)

XII. POPULATION AND HOUSING:

a) "Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?"

No housing is proposed on the project site. No new infrastructure will be created through to adjacent parcels that might induce growth. No changes in population will be induced by the temporary activities conducted for project as proposed

b) "Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?"

No housing is located on the project site and no housing will be displaced by the project as proposed.

c) "Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No people are currently occupying the project site and no housing will be displaced by the project as proposed.

Conditions, Mitigation Measures, and Project Design Features Addressing Population & Housing

No impacts were identified, therefore, no conditions, mitigation measures or project design features are included.

XIII. PUBLIC SERVICES

No extension or increased use of public services are proposed in conjunction with the proposed project. The proposed project will not increase population and will not remove any existing parks or school sites. Therefore, the project will not create an increase on the demand for the delivery of public services including fire and police protection, school facilities and parks.

a) "Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:"

"Fire protection?"

No impacts to fire safety facilities are expected from the project as proposed, because the current open space and agricultural land uses will not be changed by the proposed project.

"Police protection?"

No impacts to police facilities are expected from the project as proposed, because the current open space and agricultural land uses will not be changed by the proposed project.

"Schools?"

No impacts to school facilities are expected from the project as proposed, because the current open space and agricultural land uses will not be changed by the proposed project.

"Parks?"

No impacts to parks are expected from the project as proposed, because the current open space and agricultural land uses will not be changed by the proposed project.

"Other public facilities?"

No impacts to other public facilities are expected from the project as proposed, because the current open space and agricultural land uses will not be changed by the proposed project.

Conditions, Mitigation Measures, and Project Design Features Addressing Public Services

No impacts were identified; therefore, no conditions, mitigation measures or project design features are included.

XIV. RECREATION

The project site is approximately 335± acres in size, with a Stanislaus County General Plan land use designation of Agriculture and is zoned A-2-40 (General Agriculture) under the Stanislaus County Zoning Code. The General Plan land use designation and the zoning provide for agricultural, open space and recreational uses. The project site is contained in a Williamson Act or Land Conservation Act contract with Stanislaus County. The Williamson Act Land Conservation contract provides for open space uses, as well as agricultural uses. These open space, agricultural and recreational uses will not be precluded by the proposed project. The site is currently posted for limited fishing activities, because of the known spawning and rearing habitat for the Chinook salmon and steelhead fish populations, which are protected under the Endangered Species Act. The improved habitat for these fish may increase the number of these fish to levels found many years ago and, therefore, increase fishing pleasure in future years for recreational fishermen that have long fished in the Tuolumne River.

One neighbor expressed concerns that the habitat restoration project would entice more recreational users to the property. He stated that the project:

> *"is an invitation for increased trespassing causing thievery, vandalism and endangering and disturbing wildlife. Our family for years experienced this problem. What specific provisions have you made to confront this in the future."*

Because the project site will continue to be posted for limited fishing activities, due to the presence of fish protected under the Endangered Species Act, and because the project site is fully fenced, requiring keys to two locked gates a half-mile apart to gain access to the site, no new inducement of recreational use is expected on the project site from the habitat enhancement and floodplain restoration project proposed. There is apparently an existing trespassing problem in the neighborhood that may exist with or without the proposed project. The problem will not be exacerbated by approval of the proposed project.

a) "Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? "

The proposed habitat restoration project does not increase population and will not remove any existing recreational facilities. Therefore, the project will not increase the demand for, or result in accelerated deterioration of recreational facilities.

b) "Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? "

The proposed project is a floodplain restoration and habitat enhancement facility for species protected under the Endangered Species Act. It is not a recreational facility and does not require the expansion of recreational facilities.

Conditions, Mitigation Measures, and Project Design Features Addressing Recreation

No impacts were identified, therefore, no conditions, mitigation measures or project design features are included.

XV. TRANSPORTATION/TRAFFIC

Access to the site is provided directly from State Highway 132. A ranch road meanders through the project site. Access to the new gravel enhancement areas on the river will be provided by a new on-site haul road, which will not exceed 20-feet in width. Similar improvements are proposed to an existing ranch road to the base of the peninsula in the southwestern portion of the project site, where two gravel bars are to be enhanced. A Grading Permit (or waiver) shall be secured from the County Department of Public Works prior to project construction. An Encroachment Permit will not be required, because no work is planned within county or state rights-of-way.

After project construction is completed, the project will not generate any additional traffic from the site, because no houses or structures are proposed that would require additional vehicle access to the site.

a) "Would the project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?" A temporary increase in vehicle trips will occur during the restoration of the floodplain and the habitat enhancement activities. Vehicle trips will be limited to construction workers extracting, sorting and placing gravels on site. It is estimated that approximately twenty trips will be added to the daily traffic volume on Highway 132 during sediment preparation, floodplain restoration and habitat enhancement activities. No long-term increase in traffic will occur from approval of the proposed project, because no houses or structures are proposed that would require additional vehicle access to the site. Caltrans District 10 office, responded on January 27, 2005, that "the project does not appear to increase traffic on State Route 132 in the project area, nor does it appear to increase stream velocity or scour potential to any state highway structure in the vicinity." Therefore, the project's anticipated traffic generation is neither individually, nor cumulatively, considerable.

b) "Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?"
See preceding.

c) "Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?"
Access to the project is expected to be by private vehicle, consistent with existing traffic patterns. The use of air transportation to access the site is not anticipated. Therefore, no substantial risks to traffic patterns will occur from the approval of the proposed project.

d) "Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?"
Only changes to the on-site private ranch road are anticipated from the project as proposed. That roadway is on nearly flat ground without steep grades or cliffs (i.e., without existing hazards).

Access to the site is directly off State Route 132. Caltrans District 10 office, responded on January 27, 2005, that "the project does not appear to increase traffic on State Route 132 in the project area, nor does it appear to increase stream velocity or scour potential to any state highway structure in the vicinity." Therefore, no increased hazards to public road design features will result from the project as proposed.

e) "Could the project result in inadequate emergency access?"

No. No change in ingress or egress is proposed. Therefore, emergency access will remain unchanged as a result of the project as proposed. (See also discussion in Land Use, Paragraph e, easements).

f) "Could the project result in inadequate parking capacity?"

No public parking does or will occur on site—except during project enhancement activities. The project site is 335+ acres in area. Therefore, during project enhancement activities; adequate parking for the projected ten or fewer vehicles will be ample and will not overburden the capacity of the site.

g) "Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?"

The Stanislaus County Regional Transportation Plan does not include plans for establishing roadways on or adjacent to the project site. In addition, Caltrans, District 10 has reviewed the proposed project and found no conflicts with improvements which are or may be planned for Hwy. 132. Therefore, the project presents no conflicts with adopted policies, plans, or programs supporting alternative transportation.

Conditions, Mitigation Measures, and Project Design Features Addressing Transportation/Traffic

No impacts were identified, therefore, no conditions, mitigation measures or project design features are included.

XVI. UTILITIES AND SERVICE SYSTEMS

The proposed project does not require service by public water, public sewer or electricity. Therefore, no impacts to utilities or service systems or capacities of those systems will result from this proposed project.

a) "Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?"

Wastewater will not be generated by the proposed project. Therefore, wastewater treatment requirements will not be exceeded by the project as proposed.

b) "Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? "

The proposed project does not require service by public water or sewer. Therefore, the project as proposed will not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities**.**

c) "Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?"

No storm water drainage facility exists in this rural agricultural area. Drainage occurs in natural channels only. The project proposes to restore the natural function of the on-site flood plain to better handle high water flows. The project design was discussed with the Regional Water Quality Control Board in 2005. That agency concluded that a National Pollution Discharge Elimination System Permit (NPDES) was not required for this project (McConnell, 2005). The project would have less than a significant impact on runoff water quality or quantity based on project conditions, mitigation measures and project design features including revegetation of disturbed areas and use of a sediment basin to collect gravel wash water (or other runoff should dry-screening be used).

d) "Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?"

The proposed project does not require service by any water system. Riparian water rights associated with the parcel authorize water withdrawal from the river for the beneficial purpose of cleaning coarse sediments (for either wet-washing or water for dust-control in conjunction with dry-screening) in preparation for gravel bar restoration. Water will drain back into a sedimentation pond and percolate back into the ground and return to the river. No water diversion permits are required for the project (Mrowka, 2004.) Therefore, no impacts to water supplies will result from the proposed project.

e) "Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to provide existing commitments?"

The proposed project does not require service by public sewer. Therefore, no impacts to public wastewater capacities will result from this proposed project.

f) "Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?"

No solid waste is expected to be generated by the floodplain restoration and habitat enhancement project. Therefore, no impact to the County's Fink Road landfill is expected from this proposed project.

g) "Comply with federal, state, and local statutes and regulations related to solid waste?"

No solid waste is expected to be generated by the floodplain restoration and habitat enhancement project proposed. Therefore, the proposed project will comply with federal, state, and local statutes and regulations related to solid waste**.**

Conditions, Mitigation Measures, and Project Design Features Addressing Utilities & Service Systems

No impacts were identified, therefore, no conditions, mitigation measures or project design features are included.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

a) "Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?"

The project as proposed will restore a degraded floodplain and riparian environment for enhancement of fish and wildlife habitat. A primary purpose of the proposed project is to enhance and expand spawning and rearing habitat for salmonids. Therefore, the project does not have the potential to significantly degrade the quality of the environment or reduce habitat; but will, instead increase the quality and quantity of fish and wildlife habitat, thereby assisting in increasing the population of special status species.

b) "Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?"

Cumulatively considerable beneficial impacts may occur with implementation of the proposed project and similar projects.

Similar projects have been completed upstream of the proposed project by the California Department of Fish and Game (those projects involved hauling in off-site gravels). The result of these projects has been to improve fish spawning and rearing habitat. Cumulatively, similar projects undertaken downstream will create an even greater increase in the quality and quantity of fish spawning and rearing habitat. Therefore, cumulative impacts of multiple similar projects is increasingly beneficial to salmonids.

Potential impacts associated with dust, noise and traffic will be temporary for all phases of the project (individually and cumulatively) occurring in a rural area with a relatively low level of background noise, relatively low levels of background dust, and with proposed minimal temporary traffic impacts. Therefore no cumulative impacts are anticipated from implementation of the proposed project with respect to air quality, noise or traffic.

Temporary disturbances to soils and visual quality will occur during excavation and recontouring of the floodplain; however, the proposed revegetation plan for the proposed project (individual phases and cumulatively) will ultimately result in a return of the project site to its pre-existing floodplain appearance and function—a cumulatively beneficial impact to soils and appearance.

Project conditions, mitigation measures and project design features minimizing impacts to water quality emphasize avoiding impacts on water quality (e.g., ensuring that soils do not erode into the river, that fluids from construction equipment do not enter the river, revegetating disturbed soils). Cumulatively, the minor impacts to water quality (minimal sediment re-introduction during the re-introduction of pre-cleaned gravels) occurring with each phase of the proposed project will not contribute to exceeding a threshold of a significant impact on water quality in the Tuolumne River. The re-introduction of gravels into the river will, instead, assist in replacing sediment cover with gravel cover; thereby potentially reducing turbidity and resulting in improved water quality. Revegetation of the floodplain with natives will assist in filtering runoff; thereby resulting in improved water quality. Therefore, cumulatively, the minor, temporary

impacts associated with dust and minimal sedimentation will be outweighed by the beneficial, long-term impacts of the proposed project resulting in an overall beneficial impact to water quality.

Mineral resources on-site are limited to gravels. Because the project intends to re-use the gravels on-site; no cumulative impacts will occur.

Based on the existing background conditions, similar projects proposed in the area and the minimal cumulative impacts associated with each phase of the proposed project (individually and collectively); no cumulatively considerable adverse impacts are anticipated with the project as proposed provided that the project conditions, mitigation measures and project design features identified herein are properly implemented and maintained.

c) "Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?"

As described herein, the proposed project will restore a degraded floodplain and riparian environment for enhancement of fish and wildlife habitat. Only temporary, minimal (and non-adverse) impacts due to noise and dust which could affect humans indirectly are anticipated. Project conditions, mitigation measures and project design features will further reduce these minimal impacts to avoid effects on human beings during construction. Therefore, the project will not cause substantial adverse effects on human beings, either directly or indirectly.

Conditions, Mitigation Measures, and Project Design Features Addressing Mandatory Findings of Significance

No impacts were identified that necessitates a Mandatory Finding of Significance. Therefore, no conditions, mitigation measures or project design features are included.

ALTERNATIVES CONSIDERED

No Project

Leaving the project site in its existing states (No Project) would not accomplish the project goals of enhancing and restoring habitat for special status species with the intent of assisting in the increase of special status wildlife populations. The No Project alternative will not assist in increasing spawning and rearing habitat for salmonid populations—nor increase natural vegetation to assist in increasing songbird populations. The No Project alternative would not assist in restoring normal floodplain functions and would not assist in controlling scour in this reach of the Tuolumne River. Given the potential benefits of the Project Alternative; the No Project alternative is less desirable environmentally, than the Project Alternative.

Off-Site Gravel Importation

This alternative would forego extraction activities on-site in favor of bringing off-site gravels to the project area. This alternative would have similar impacts to those of the proposed project. The alternative would require removal of a limited amount of trees and shrubs in conjunction with construction of haul roads to access the river for enhancement and creation of gravel bars in-stream—equivalent to those anticipated with the proposed project. This alternative could reduce some of the project impacts associated with the creation of noise and dust associated with gravel processing; however, haul trucks and equipment bringing off-site gravel to the project site would still generate noise and dust nearly equivalent to that anticipated with the proposed project.

This alternative has the potential to increase truck traffic on a relatively narrow farm road with gravel deliveries—a potentially significant impact creating not only conflicts with adjoining land uses; but also impacts associated with dust, and noise both on and off-site. Finally, this alternative would not assist in returning gravels to the river and removing them from the floodplain. This would not achieve the proposed project goal of returning natural floodplain processes to the floodplain. Maintenance of compacted cobbles throughout the floodplain restricts revegetation by native plant species. This alternative would limit opportunities for removing compacted cobble "pavement" areas to be replaced with native plant patches.

Therefore, the potential limited benefits of minimal decreases in on-site noise and dust possible with this alternative are outweighed by the inability of this alternative to achieve two key project goals: restoring natural floodplain processes and reintroduction of native plant species to the site.

Proposed Project

The "Proposed Project " alternative restores the degraded floodplain function and restores the habitat for Chinook salmon and steelhead. It is the only alternative that yields the best results for the longest period of time. It provides for the maintenance of the enhanced river habitat. It proposes the least impact to the riparian trees and Valley oaks along the river. The proposed improvements cannot be undertaken in any other location because of the extensive private land holdings in this reach of the river, and there is no practical alternative to the proposed project. Failure to provide these improvements would result in continued inaccessibility to the Chinook salmon and steelhead to adequate spawning and rearing habitat in River Mile 43 of the Tuolumne River. Therefore, the preferred alternative is the proposed action.

CONDITIONS, MITIGATION MEASURES, DESIGN FEATURES

A list of conditions, mitigation measures and design features are found in **Appendix A.** These measures, if properly implemented and maintained, are expected to avoid potential impacts or minimize any impacts or effects to a level of less-than-significant.

Sources & References:

Local/County

1. San Joaquin Valley Unified Air Pollution Control District, August, 1998, including revisions through January, 2002. *Guide for Assessing and Mitigating Air Quality Impacts*.
2. Stanislaus Council of Governments. Final Report, 2001. *Stanislaus County Regional Transportation Plan*.
3. Stanislaus County. Adopted October, 1994, including revisions through December, 2003. *Stanislaus County General Plan*.
4. Stanislaus County. Adopted April, 1992. *Stanislaus County Agricultural Element of the General Plan*.
5. Stanislaus County. Adopted June, 1987. *Stanislaus County General Plan Support Documentation*.
6. Stanislaus County. Undated. *Stanislaus County Zoning Ordinance*; *Title 21*
7. Stanislaus County. Adopted August 3, 1978; Updated May, 2004. *Stanislaus County Airport Land Use Commission Plan*

State

8. California Department of Transportation. November 22, 2004. *The California Scenic Highway System List of Eligible and Officially Designated Routes*; www.dot.ca.gov/hq/LandArch/scenic/1.htm and www.dot.ca.gov/hq/LandArch/scenic/left.htm
9. California Environmental Quality Act.
10. Natural Diversity Data Base Maps, Department of Fish & Game
11. Mrowka, Kathy. State Water Resources Control Board Division of Water Rights. Personal Communication, February 15, 2004. Confirmed that proposed water use for gravel wash is riparian right and no permits are required.
12. Fitzgerald, Jim. The Resources Agency, Division of Mines and Geology. January 24, 2005. Personal communication. Stated project description should state that no excavated materials would be transported or sold off the project site in order to avoid any SMARA triggers. Requested Neg Dec be copied to them Attn: Jim Pompy, Reclamation Unit at 801 K St. in Sacramento. Requested a copy of Grading Plans.
13. California Department of Fish and Game. Amphibian and Reptile Species of Concern in California. Western Pond Turtle. 1994. www.dfg.ca.gov/hcpb/cgi-bin/read_oneasp?specy=reptiles&idNum=8
14. Day, George. Senior Water Quality Engineer. Central Valley Regional Water Control Board. (916) 464-4606. November 17, 2004 (Personal Communication with FOT). Mercury monitoring is unnecessary for the project to address this agency's concerns.
15. McConnell, Sue. Regional Water Quality Control Board. (916) 464-4798. Personal Communication February 15, 2005. Requirement for NPDES permit for proposed project not anticipated.
16. CVPIA Programmatic EIS/EIR (October 1999)
17. CALFED Bay-Delta Record of Decision (August 28, 2000)
18. CALFED Bay-Delta Program's Ecosystem Restoration Program Plan (1999)
19. Multi-species Conservation Strategy, prepared for CALFED Bay-Delta Program (July 2000)
20. CNDDB (California Natural Diversity Database). 2009. California Department of Fish and Game's Natural Heritage Program, Sacramento, California.

Federal

21. Federal Emergency Management Agency. Effective Date August 1, 1980. *Flood Insurance Rate Map, Community Panel Number 060334 0375 A.*
22. National Marine Fisheries Service *Central Valley Chinook Salmon Current Stream Habitat Distribution Table*, Southwest Regional Office; www.swr.nmfs.noaa.gov/hcd/dis2.htm

23. United States Department of Agriculture, Soil Conservation Service in cooperation with California Agricultural Experiment Station; September, 1964. *Soil Survey, Eastern Stanislaus Area, California Sheet Number 47*.
24. United States Department of Agriculture, Natural Resources Conservation Service. July 20, 2004 (updated). California Department of Conservation Farmland Mapping and Monitoring Program *Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, Stanislaus County*.
25. United States Environmental Protection Agency Department of Toxic Substance Control. September, 1997. *Hazardous Waste and Substance Site List*.
26. United States Fish and Wildlife Service. *Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in Stanislaus County, Cooperstown Quadrangle (441A)*; USFWS, November 22, 2004. www.sacramento.fws.gov/es/spp_lists/auto_list.cfm
27. Army Corp of Engineers Final Notice of Issuance, Reissuance, and Modification of Nationwide Permits in the Federal Register
28. ACOE (U.S. Army Corps of Engineers). 1987. Technical Report Y87-1. U.S. Army Corps of Engineers Waterways Experiment Station, Vicksburg, MI.
29. Mesick, Carl. United States Fish and Wildlife Service. Personal Communication. February 17, 2005.
30. National Environmental Policy Act (NEPA)
31. USFWS (United States Fish and Wildlife Service). 1999. Conservation Guidelines for the Valley Elderberry Longhorn Beetle. July 9.
32. USFWS. 2004a. Final Rule: Determination of Threatened Status for the California Tiger Salamander. Federal Register vol. 69, No. 149, August 4, 2004, pp. 47212 – 47248.
33. USFWS. 2004b. Proposed Rules for Designated Critical Habitat for the California Tiger Salamander. Federal Register vol. 69, No. 153, August 10, 2004, pp. 48570 – 48649.
34. USFWS. 2004c. U.S. Fish & Wildlife Service, Sacramento Fish and Wildlife Office Critical Habitat Maps. "http://sacramento.fws.gov/es/crit_hab-maps.htm"

Other

35. Davis-King & Associates. September, 2004. *Historic Properties Survey Report of the Proposed Bobcat Flat (River Mile 43) Coarse Sediment Introduction Project, Tuolumne River near La Grange, Stanislaus County, California.*
36. Jeanne Hammond, Roy Churchwell, and Geoffrey Geupel, members of the Point Reyes Bird Observatory, *"Songbird Monitoring on Grayson River Ranch and Bobcat Flat"*, conducted during 2001.
37. Moore, Diane. Moore Biological Consultants, *"Baseline Biological Resources Inventory for the Bobcat Flat Restoration Project, Stanislaus County, California"*, conducted during 2004.
38. Moore Biological Consultants, Diane Moore. March 11, 2010. "Baseline Biological Resources Assessment: Bobcat Flat River Mile (RM) 43 Phase II Restoration Project, Stanislaus County, California"; March 11, 2010. (**Appendix C**)
39. McBain and Trush. December 9, 2009. "Bobcat Flat RM 43 Phase II Restoration; 30% Design Document; Technical Memorandum" [Hereinafter, McBain & Trush, 2009] (**Appendix D**)
40. "Notice of Determination; Bobcat Flat Coarse Sediment Introduction and Riparian Restoration Project"; State Clearinghouse Number: 2005022101; Filed April 19, 2005 – Stanislaus County Clerk (**Appendix E**)
41. Final Programmatic EIS/EIR for the CALFED Bay-Delta Program (July 2000)
42. Baicich, Paul and Harrison, Colin; et. al. A Guide to the Nests, Eggs and Nestlings of North American Birds, 2nd Ed.; Academic Press. 1997.
43. FOT (Friends of the Tuolumne). 2003. Tuolumne River, Bobcat Flat Conceptual Restoration Plan. Submitted to the California Bay-Delta Program. August.

44. Jennings, M.R. and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Prepared for California Department of Fish and Game, Rancho Cordova, California. November.
45. Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society, Sacramento. California.

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

For U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Sacramento, CA 95814

☐ County Clerk

County of: _____

Address: _____

From:

Public Agency: California Department of Fish and Game

Address: 1234 E. Shaw Avenue, Fresno, California 93710

Contact: Julie Vance

Phone: (559) 243-4005 Ext. 141

Lead Agency (if different from above):

_____

Address: _____

Contact: _____

Phone: _____

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2010072048

Project Title: Bobcat Flat West Restoration Phase II, River Mile 43

Project Location (include county): Tuolumne River; west of Rushing Road and South of Hwy 132, Stanislaus Co.

Project Description:

Salmonid spawining habitat restoration in the Tuolumne River on the Bobcat Flat property located approximately five river miles west of the community of La Grange. Cobble material excavation, sorting, cleaning, and introduction into 9 to 14 "patches" to restore a natural pool-riffle morphology in the river channel. At the downstream end of the work area, Duck Slough will be reconnected to the mainstem river channel.

This is to advise that the California Department of Fish and Game has approved the above described project on

☒ Lead Agency or ☐ Responsible Agency

August 25, 2010 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: California Department of Fish and Game; 1234 E. Shaw Avenue; Fresno, California 93710

Signature (Public Agency) _____ Title Regional Manager

Date 8/25/10 Date Received for filing at OPR _____

RECEIVED
AUG 30 2010
STATE CLEARING HOUSE

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2005

`APPENDIX A
MITIGATION AND MONITORING MEASURES

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
Air Quality			
AQ-01. Submit for approval a Dust Control Plan pursuant to Regulation VIII of the San Joaquin Valley Air Pollution Control District.	Prior to commencing construction.	Friends of the Tuolumne	CDFG
AQ-02. Obtain an Authority to Construct permit or waiver from the San Joaquin Valley Air Pollution Control District.	Prior to commencing construction	Friends of the Tuolumne	CDFG
AQ-3. If burning is require for on site brush, a burn permit shall be secured from the San Joaquin Valley Air Pollution Control District.	Prior to commencing burning	Friends of the Tuolumne	CDFG
Biological Resources			
BIO-1. a. In stream work shall be limited to a specific time period to avoid spawning and rearing and out migration periods for the Chinook salmon and steelhead. b. Pre-construction meetings will be conducted to brief all contractors and workers on best management practices: • Access routes to the construction area and the size of staging and work areas will be limited to the minimum necessary to achieve the project goals. Routes and boundaries of the access roads will be clearly marked prior to initiating construction/grading. • Timing for in-stream work (July 15th to October 15th and restricted to the hours of 7:00 a.m. to 7:00 p.m.) • All food and food related trash will be enclosed in	a. In stream work shall be confined to July 15th to October 15th b. Prior to ground or vegetation disturbance.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
sealed trash containers at the end of each workday and removed completely from the construction site once every three days. • No pets will be allowed on the construction site. • No firearms will be allowed on the construction site. • A speed limit of 15 mph on dirt roads will be maintained. • All equipment will be maintained such that there will be no leaks of automotive fluids such as fuels, oils, and solvents. Any fuel or oil leaks will be cleaned up immediately and disposed of properly. • Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 500 feet from the channel. • Other conditions necessary to minimize and avoid project impacts.			
BIO-2. a. When feasible, tree and brush removal shall occur between February 1st and August 30th to avoid the general nesting season for raptors and other birds. In the event that trees or vegetation removal must occur during the avian nesting season (between February 1st and August 30th) nesting bird surveys shall be conducted by a qualified biologist no more than 30 days before initiating tree or brush removal activities to verify that no nesting sites will be impacted. b. If active nests are found during the required nesting bird surveys or through other means, a minimum 100-foot buffer zone shall be established around all active nests, and this buffer will remain around each active nest until a qualified biologist has determined that the young have fledged. If a nesting Swainson's hawk, bald eagle or white-tailed kite is identified on-site or within 0.5 miles of the construction site, a minimum 0.25 mile buffer shall be established around each nest and CDFG will be notified within 24 hours of identifying the active nest. Routine	a. Prior to ground disturbance or vegetation removal between February 1st and August 30th. b. Any time active nests are found.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
monitoring, as directed by CDFG, of these nests will be required, and the buffer zones may need to be enlarged if it appears that project-related activities are or could be causing stress to nesting birds and/or their eggs/young. c. Educate contractors and workers prior to commencement of construction and excavation activities on the appropriate timing for vegetation removal. d. Conduct a pre-construction meeting to brief all contractors and workers regarding: • Timing for tree and vegetation removal. • Verifying that a qualified biologist has completed pre-construction nesting bird surveys. • Provide information to onsite workers to look for and recognize Swainson's hawk, bald eagles, white-tailed kites and other special status birds and their nests to avoid accidental direct impacts (i.e., "take") by removing trees or bushes containing active nests. • Measures to avoid impacts to nesting birds will be implemented by workers and include delineating and adhering to buffer zones. • Other conditions necessary to minimize and avoid project impacts.	c. Prior to removing trees, brush, or commencing construction activities. d. Prior to removing trees, brush, or commencing construction activities.		
BIO-3. a. Conduct a pre-construction meeting to brief all contractors and workers prior to commencement of ground disturbance and construction activities regarding: • Timing for ground disturbance and construction activities. • Verifying that a qualified biologist has completed pre-construction nesting bird surveys. • Provide information to onsite workers to look for and recognize Swainson's hawk, bald eagles, white-tailed kites and other special status birds and their nests to	a. Prior to project initiation.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
avoid accidental direct impacts (i.e., "take") by disturbing nesting activities with ground disturbance or construction encroachment. • Measures to avoid impacts to nesting birds will be implemented by workers and include delineating and adhering to buffer zones. • Other conditions necessary to minimize and avoid project impacts.			
BIO-4. a. A qualified biologist shall conduct a visual pre-construction survey for western pond turtles and potential turtle nesting sites in those areas proposed for disturbance. If a turtle next is found within an area proposed for disturbance, then a 50 foot buffer area shall be established to protect the nest. b. Conduct a pre-construction meeting to brief all contractors and workers regarding: • Verifying that a qualified biologist has completed pre-construction surveys for western pond turtles and that survey results were negative or other provisions as identified in the mitigation measure have been put into place. Minimum 50-foot buffer zones around all turtle nests will be established and clearly delineated. Include contact information for the project biologist and for the CDFG to the project contractors. • Provide information to onsite workers to recognize and look for the turtles moving about the project site to avoid accidental direct impacts (i.e., "take") to one or more individual western pond turtles (e.g., driving over turtles with construction equipment as turtles cross roadways or the active construction site). • Ensure that turtles can escape from the steep-walled sedimentation pits by providing ramps or other escape routes.	a. No more than 30 days prior to project initiation or commencing any ground disturbing work. b. Prior to project initiation or commencing any ground disturbing work.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
• Allowing turtles to leave a roadway or construction zone before continuing work, • Observing a 15 mph speed limit for all vehicles and construction equipment.			
BIO-5. a. Erect brightly colored temporary fencing that will remain in place and be maintained throughout project construction and restoration activities: • 20 feet from the outer edge of the dripline of elderberry shrub "K" • No work shall occur within 100 feet of any remaining elderberry shrubs • Contractors and workers will be briefed on the importance of not disturbing the buffer zones around elderberry bushes.	a. Prior to ground or vegetation disturbance and prior to moving equipment on site.	Friends of the Tuolumne	CDFG
BIO-6. a. Brush or other vegetation removed to facilitate access to the river for sediment enhancement will be re-used in brush piles for bird habitat to the maximum extent feasible. a. Prior to burning any remaining brush on site, a waiver or permit for agricultural burning will be secured from the San Joaquin Valley Air Pollution Control District.	a. Prior to ground or vegetation disturbance, whichever occurs first, a pre-construction meeting will be held to brief all contactors and workers regarding the disposition of brush to be retained and to be burned.	Friends of the Tuolumne	CDFG
BIO-7. a. All gravels will be cleaned before being placed in the river. • For wet washing and for mist screens used during the dry cleaning process, water will be pumped from the river and existing on-site ponds using a hose fitted with a NMFS-approved screen sufficient to exclude juvenile fish. • Runoff from all gravel washing activities will be	a. Prior to ground or vegetation disturbance a pre-construction meeting will be held to brief all contactors and workers regarding the use of hose screens and	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
contained within a sediment basin and the runoff will be allowed to percolate into the ground below the basin.	wash / mist screen runoff water requirements.		
BIO-8. a. All elderberry shrubs located on the project site will be retained. • During the flight of the valley elderberry longhorn beetle (March 15 – June 15), no construction work will occur within 100 feet of the dripline of any elderberry shrub. • Outside of the flight of the valley elderberry longhorn beetle (June 30 – March 1), no disturbance will occur within 20 feet of the outer drip line of the elderberry shrub designated as "K" (see Figure 6). For all other elderberry shrubs on site, construction work will not occur within 100 feet of the dripline. • No insecticides, herbicides, fertilizers, or other chemicals that may impact or otherwise harm the beetle or its host plant shall be used within 100 feet of any elderberry bush. • Buffer zones around each elderberry bush on site will be clearly delineated through the use of temporary fencing.	a. Prior to moving any equipment onto the site, a pre-construction meeting will be conducted to brief all contactors and workers regarding: • Buffer zones for elderberry bushes during the VELB flight and outside of the VELB flight. • The exclusion zone for the use of insecticides, herbicides, fertilizers, and other chemicals that could harm the VELB or its host plant. • Prior to any ground disturbing activities, erect temporary fencing clearly delineating the buffer zones around each elderberry bush on site.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
BIO-9. a. During Project construction • Equipment and vehicles will not exceed a speed limit of 20 miles per hour within the project boundaries to avoid potential impacts to wildlife. • To prevent inadvertent entrapment of wildlife during construction, all excavated steep walled holes or trenches should be covered during the close of each working day and provided with one or more escape ramps. • Before each hole or trench is filled it should be thoroughly inspected for trapped animals. • The construction site, construction materials, and equipment should be inspected each morning before work begins to confirm the absence of wildlife. • All food-related trash items such as wrappers, cans, bottles, and scraps will be disposed of in closed containers and removed at least every three days from the project site. b. Pre-construction meetings will be conducted to brief all contractors and workers on best management practices.	a. At all times During Project construction. b. Prior to moving any equipment onto the site or commencement of any ground disturbing activities.	Friends of the Tuolumne	CDFG
BIO-10. a. Prepare a spill response plan to address the appropriate methods for containing accidental spills of toxic materials (e.g., engine oils). b. Throughout Project construction: • Removal of mature trees and shrubs shall be limited to areas indicated on the project site plan as necessary to	a. Prior to moving any equipment onto the site or commencement of any ground disturbing activities. b. Prior to site disturbance a pre-construction meeting will be	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
access new gravel bars to be created or enhanced for fish habitat restoration along the river on the project site in accordance with the project site plan (**Figures 4&5)** • All gravel processing areas (washing, sorting, screening, stockpiling) shall occur a minimum of 500 feet from the river channel. As noted, the project proponents initially will clean gravels using both wet-washing and dry-screening techniques for comparison. The more effective of the two options will be implemented for the majority of the project. • Storing or washing equipment, vehicles or construction materials shall not occur within 500 feet of the river or pond areas. • Equipment refueling and maintenance shall occur outside of the floodplain. • Stream crossings and pond crossings shall be limited to those areas identified on the project site plan (**Figures 4&5**). • All gravels shall be cleaned before being placed in the river. The project proponents initially will clean gravels using both wet-washing and dry-screening techniques for comparison. The more effective of the two options will be implemented for the majority of the project. For wet-washing, (and potentially for dry-screening which will employ a mist screen above/through the dust when heavy dust is generated by the screen plant in accordance with SJVAPCD regulations), water shall be obtained from the river. The pump hose for water extraction shall be fitted with a NMFS-approved screen sufficient to exclude juvenile fish. Alternatively, water may be pumped from on-site ponds using the same NMFS approved screening and velocity reduction methods. Runoff from all gravel washing activities shall be contained within a sediment basin. Runoff will be allowed to percolate into the ground below the sediment basin.	conducted to brief all contactors and workers on best management practices.		

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
• All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in closed containers and removed at least every three days from the project site. • To avoid the potential for introduction of invasive species such as New Zealand mudsnails (*Potamopygus antipodarum*) into the Tuolumne River or Mud Slough, all equipment will be steam cleaned prior to use on the project and immediately after the work is completed and before being used in other waterbodies.			
BIO-11. a. An erosion and sediment control plan shall be implemented to prevent impacts outside of the project construction area. Bank, landscape excavation areas, and all other disturbed areas (including road access points to the river used to deposit gravels for enhancement or construction of gravel bars) shall be stabilized as soon as possible or no later than October 15th of the construction year. Disturbed areas shall be stabilized using tightly woven natural fiver netting or similar material to ensure sensitive wildlife (such as western pond turtles) cannot be trapped. No plastic monofilament matting will be used for erosion control. b. Revegetation shall be in accordance with the project Revegetation Plan (**Appendix B**). Only certified weed free native grass seed will be used for reseeding.	a. The erosion and sediment control plan will be developed prior to moving any equipment onto the site or commencement of any ground disturbing activities. b. Prior to moving equipment on-site, ground disturbance, construction or excavation activities a pre-construction meeting with contractors, equipment operators shall be conducted to review this project requirement	Friends of the Tuolumne	CDFG
BIO-12. a. Prior to commencing soil disturbances, protection buffers will be established around trees to be retained that are	a. In accordance with grant provisions, grant	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
located in proximity to construction areas (e.g., roadways, borrow areas). Within one year of soil disturbance, revegetation shall occur as outlined in **Appendix B**. Fines segregated from the gravel during screening will be placed in the excavated areas to improve substrate for planting and recruitment. b. Should survival rates fall below 70% within a three year time span, Friends of the Tuolumne will add survival shortfalls and will conduct replanting and monitoring annually as necessary to achieve a 70% survival rate.	reporting will include the results of an inventory of new plants (valley oaks and riparian plantings) and indicate their survival rate.		
BIO-13. a. Prior to ground or vegetation disturbance, whichever occurs first, obtain the following permits, authorizations, certifications, or agreements: • Authorization under federal Clean Water Act Section 404 • A federal Clean Water Act Section 401 Water Quality Certification • A Lake or Streambed Alteration Agreement pursuant to Section 1602 of the California Fish and Game Code • Central Valley Flood Protection Board (CVFPB) Encroachment Permit (CA Code of Regulations, Title 23, Division 1, Article 3, Section 6) • Grading Permit, or waiver, from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060) • Prepare, submit and secure approval for a Dust Control Plan from the San Joaquin Valley Air Pollution Control District. The Dust Control Plan should include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities and haul roads. (APCD, Regulation VIII)	a. Document the necessary permits, authorizations, certifications, or agreements as listed have been obtained prior to any vegetation removal / ground disturbance.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
• Secure an Authorization to Construct permit, or waiver, from the San Joaquin Valley Air Pollution Control District (APCD Rule 2010) • Complete appropriate consultations with the U.S. Fish and Wildlife Service/NOAA Fisheries • Acquire an Encroachment Permit from the California State Lands Commission (Public Resources Code Section 6221) • Waiver for mineral extraction operations from the Stanislaus County Community Development Department (Stanislaus County Code Section 21.20.030)			
BIO-14. a. During Project Construction & Enhancement Activities, all work shall be conducted in accordance with the conditions established pursuant to the following permits, consultations and agreements: • Authorization under federal Clean Water Act Section 404 (CWA, Section 404) • Federal Clean Water Act Section 401 Water Quality Certification (CWA, Section 401) • Lake or Streambed Alteration Agreement pursuant to Section 1602 of the California Fish and Game Code (CA Fish and Game Code, 1602 et seq.) • Central Valley Flood Protection Board (CVFPB) Encroachment Permit (CA Code of Regulations, Title 23, Division 1, Article 3, Section 6) • Grading Permit, or waiver, from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060) • Dust Control Plan from the San Joaquin Valley Air Pollution Control District. The Dust Control Plan should include provisions for an on-site watering truck to provide for wetting during gravel processing,	a. Document the necessary reporting requirements have been satisfied to demonstrate work was conducted consistent with issued permits, authorizations, certifications, or agreements for the life of the construction project.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
extraction activities and haul roads. (APCD, Regulation VIII) • Authorization to Construct permit, or waiver, from the San Joaquin Valley Air Pollution Control District (APCD Rule 2010) • Consultations with the U.S. Fish and Wildlife Service/NOAA Fisheries • Encroachment Permit from the California State Lands Commission (Public Resources Code Section 6221) • Conditional Use Permit, or waiver, for mineral extraction operations from the Stanislaus County Community Development Department (Stanislaus County Code Section 21.20.030)			
Cultural Resources			
CULT-01. a. All contractors and equipment operators shall be instructed to watch for potential archeological artifacts (including glass pieces, ceramic pieces, square nails and human remains), pursuant to Section 106 of the National Historic Preservation Act. If a potential cultural resource is discovered during the any portion of the activities described for this project, the following provisions will be implemented: • The person discovering the cultural resource will notify the professional archaeologist by telephone within 4 hours of the discovery or the next working day if their office is closed. Project Archaeologist: Shelly Davis-King, phone: (209) 928-3443. • When the cultural resource is located outside the area of disturbance, the professional archaeologist will be allowed to photodocument and record the resource and construction activities may continue during this process. The area of disturbance includes grading and vegetation removal, plus 33 feet (10 meters).	a. Prior to moving equipment on-site, ground disturbance, construction or excavation activities, a pre-construction meeting with contractors, equipment operators and other individuals involved in the project will be conducted to review these project requirements.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
• When the cultural resource is located within the area of disturbance, all activities that may impact the resource will cease immediately upon discovery of the resource. All activity that does not affect the cultural resource as determined by the consulting archaeologist may continue. A qualified archaeological professional, such as an archaeologist or an historian, will conduct a survey to evaluate the significance of the cultural resource. • When the cultural resource is determined to not be significant, the qualified professional archaeologist will photodocument and record the resource. Construction activities may resume after authorization from the professional archaeologist • When a resource is determined to be significant, the resource will be avoided with said resource having boundaries established around its perimeter by a qualified professional archaeologist or historian or a cultural resource management plan shall be prepared by a qualified professional to establish measures formulated and implemented in accordance with Sections 21083.2 and 21084.1 of the California Environmental Quality Act (CEQA) to address the effects of construction on the resource. The qualified professional shall be allowed to photodocument and record the resource. Construction activities may resume after authorization from the professional archaeologist.			
CULT-02. a. If human remains are discovered during subsurface excavations on the project site, work will immediately stop and the County Coroner will be notified. No work will resume until the Coroner has made the necessary determination as to the origin and disposition of the remains, pursuant to Public Resources Code, Section 5097.98 and State Health and Safety Code, Section 7050.5.	a. Prior to moving equipment on-site, ground disturbance, construction or excavation activities, a pre-construction meeting with	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
If the remains are Native American, the coroner must notify the Native American Heritage Commission within 24 hours. The NAHC will immediately notify the Most Likely Descendant (Public Resources Code 5097.98)	contractors, equipment operators and other individuals involved in the project will be conducted to review these project requirements.		
Geology and Soils			
GEO-01. a. Obtain the following permits, authorizations, certifications, or agreements: • Authorization under federal Clean Water Act Section 404 • A federal Clean Water Act Section 401 Water Quality Certification. • Grading Permit, or waiver, from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060). • Prepare, submit and secure approval for a Dust Control Plan from the San Joaquin Valley Air Pollution Control District. The Dust Control Plan should include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities and haul roads. (APCD, Regulation VIII).	a. Document the necessary permits, authorizations, certifications, or agreements as listed have been obtained prior to any vegetation removal / ground disturbance.	Friends of the Tuolumne	CDFG
GEO-02. a. Removal of mature trees and shrubs will be limited to areas indicated on the project site plan as necessary to access new gravel bars to be created or enhanced for fish habitat restoration along the river on the project site in accordance with the project site plan (**Figures 4&5**).	a. Prior to moving any equipment onto the site or commencement of any ground disturbing activities, a pre-construction meeting will be conducted to	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
	brief all contactors and workers on the locations for brush and tree conservation and removal and contact information for the project biologist.		
GEO-03. a. An erosion and sediment control plan will be implemented to prevent impacts outside of the project construction area. b. Bank, landscape excavation areas, and all other disturbed areas (including road access points to the river used to deposit gravels for enhancement or construction of gravel bars) will be stabilized as soon as possible or by no later than October 15 of the construction year. Stabilization will occur by using tightly woven natural fiber netting or similar material to ensure sensitive wildlife (such as western pond turtles) will not be trapped. No plastic monofilament matting will be used for erosion control. c. Re-vegetation shall be in accordance with the project Re-vegetation Plan (**Appendix B**). Only certified weed free native grass seed will be used for reseeding.	a. The erosion and sediment control plan will be developed prior to moving any equipment onto the site or commencement of any ground disturbing activities. b. Prior to moving any equipment onto the site or commencement of any ground disturbing activities a pre-construction meeting will be conducted to brief all contactors and workers to review these requirements.	Friends of the Tuolumne	CDFG
Hazardous Materials			
HAZ-01. a. The gravel wash water area (for wet-washing) will be located more than 500± feet from the river and include a sediment basin for the collection of all wash water. Wash water will be percolated through the ground in sediment basins to avoid the introduction of mercury into the river.	a. Prior to moving equipment on-site, ground disturbance, construction or excavation activities a	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
Alternatively, if dry-screening is used, it is anticipated that some water will be pumped from the river to implement dust-control measures. Any runoff associated with gravel will include these provisions. Dry screening for gravel cleaning (without the use of rinse water) will use screens of sufficient size to eliminate sands with the potential to contain mercury.	pre-construction meeting with contractors, equipment operators and other individuals involved in the project will be conducted to review this project requirement.		
HAZ-02. a. Prior to site disturbance prepare a spill response plan to address the appropriate methods for containing accidental spills of toxic materials (e.g., engine oils).	a. Prior to moving any equipment onto the site or commencement of any ground disturbing activities a pre-construction meeting will be conducted to brief all contactors and workers on the location of the spill response plan and other best management practices and mitigation measures.	Friends of the Tuolumne	CDFG
Hydrology and Water Quality			
HYDRO-01. a. Implement the following provisions to reduce impacts to water quality: • Prior to site disturbance prepare a spill response plan to address the appropriate methods for containing accidental spills of toxic materials (e.g., engine oils).	a. Prior to moving any equipment onto the site or commencement of any ground disturbing activities a pre-construction meeting	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
b. Throughout Project Construction: • Removal of mature trees and shrubs will be limited to areas indicated on the project site plan as necessary to access new gravel bars to be created or enhanced for fish habitat restoration along the river on the project site in accordance with the project site plan (**Figures 4&5)** • All gravel processing areas (washing, sorting, screening, stockpiling) will occur a minimum of 500 feet from the river channel. • Storing or washing equipment, vehicles or construction materials will not occur within 500± feet of the river or pond areas. • Equipment refueling and maintenance will occur outside of the floodplain. • Stream crossings and pond crossings will be limited to those areas identified on the project site plan (**Figures 4&5**). • All gravels shall be cleaned before being placed in the river. For wet-washing, water will be obtained from the river. Runoff from all gravel washing activities will be contained within a sediment basin. Runoff will be allowed to percolate into the ground below the sediment basin. It is anticipated that some water will be pumped from the river even with the use of dry-screening to implement dust-control measures, therefore, this measure is anticipated for either wet-washing or dry-screening gravels. • All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in closed containers and removed at least every three days from the project site.	will be conducted to brief all contactors and workers on the location of the spill response plan, which trees and brush are to be removed / conserved, equipment and materials storage areas, approved stream and pond crossings, and other best management practices and mitigation measures.		
HYDRO-02. a. Bank, landscape excavation areas, and all other disturbed areas (including road access points to the river used to deposit gravels for enhancement or construction of gravel	a. Soil stabilization of banks and all disturbed areas will occur prior to	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
bars) will be stabilized as soon as possible or by no later than October 15th of the construction year. Stabilization will occur by using tightly woven natural fiber netting or similar material to ensure sensitive wildlife (such as western pond turtles) will not be trapped. No plastic monofilament matting will be used for erosion control. b. Re-vegetation shall be in accordance with the project Re-vegetation Plan (**Appendix B**). Only certified weed free native grass seed will be used for reseeding.	October 15th of the construction year. b. Prior to moving equipment of site, ground disturbance or construction activities; conduct a pre-construction meeting with contractors, equipment operators, and other involved in the project to review this requirement.		
HYDRO-03. a. Obtain the following permits, authorizations, certifications, or agreements: • Authorization under federal Clean Water Act Section 404 (CWA, 404) • A federal Clean Water Act Section 401 Water Quality Certification (CWA 401) • Grading Permit (or waiver) from the Stanislaus County Department of Public Works (Stanislaus County Code Section 16.05.060) • Prepare, submit and secure approval for a Dust Control Plan from the San Joaquin Valley Air Pollution Control District. The Dust Control Plan should include provisions for an on-site watering truck to provide for wetting during gravel processing, extraction activities and haul roads. (APCD, Regulation VIII)	a. Document the necessary permits, authorizations, certifications, or agreements as listed have been obtained prior to any vegetation removal / ground disturbance.	Friends of the Tuolumne	CDFG

MITIGATION MEASURE	TIMING	IMPLEMENTING ENTITY	MONITORING ENTITY
Noise			
NOISE-01. a. Equipment operation; excavating, screening, gravel cleaning, road construction and gravel bar construction activities are limited to 7:00 a.m. to 7:00 p.m., daily.	a. Prior to moving equipment on-site, ground disturbance, construction or excavation activities a pre-construction meeting with contractors, equipment operators and others involved in the project will be conducted to brief them on the hours of operation.	Friends of the Tuolumne	CDFG
NOISE-02. a. Secure an Authority to Construct Permit from the San Joaquin Valley Air Pollution Control District (APCD Rule 2010).	a. Document the Authority to construct was obtained prior to moving equipment on site and that the necessary reporting requirements have been satisfied to demonstrate work was conducted consistent with issued authorization for the life of the construction project.	Friends of the Tuolumne	CDFG

APPENDIX B
Revegetation-Rehabilitation Plan

Phase II Tree Removal: Is estimated to include 6-8 valley oaks and approximately 36 willows and cottonwoods. Replanting for tree removal is described in the following.

PHASE II REVEGETATION PLANTING DESCRIPTION AND PLANT LIST

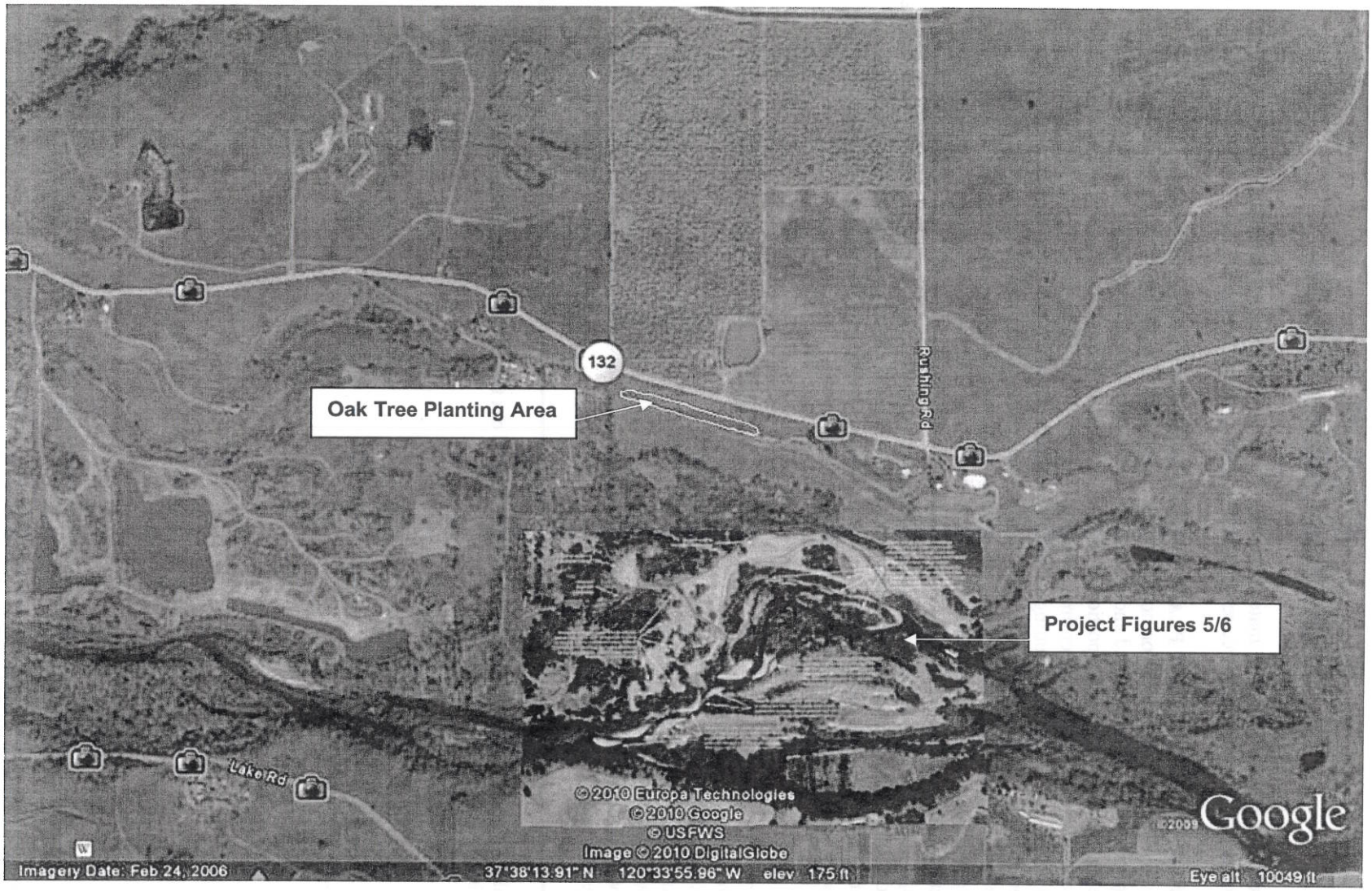
Phase 1 (completed) re-vegetation noted a significant contribution by natural regeneration when the floodplain surfaces were lowered and made more conducive to seed germination. Revegetation of the Phase 2 restoration will plant a portion of the desired plants and test natural regeneration on a portion for a comparative evaluation over time. Planting plans at Bobcat Flat, Phase II calls for approximately 1,100 willow and cottonwood cuttings. Of the total plants, all will be trees the revegetation will be implemented as part of the larger Bobcat Flat floodplain restoration project overseen by Friends of the Tuolumne, but the revegetation planting description is included here to show compliance with Reclamation Board permit requirements on planting layouts. The trees will be planted to conform to Reclamation Board spacing requirements. Trees will be aligned with the direction of possible flood flowage in rows spaced at least 20 feet apart and planted approximately 15 feet on center. Plants will be placed in areas where conditions are appropriate for the species and in groupings to form plant communities. No planting will be done within the side channel or any existing scour channel or on its slopes such that overall flood conveyance should be improved.

Plant list

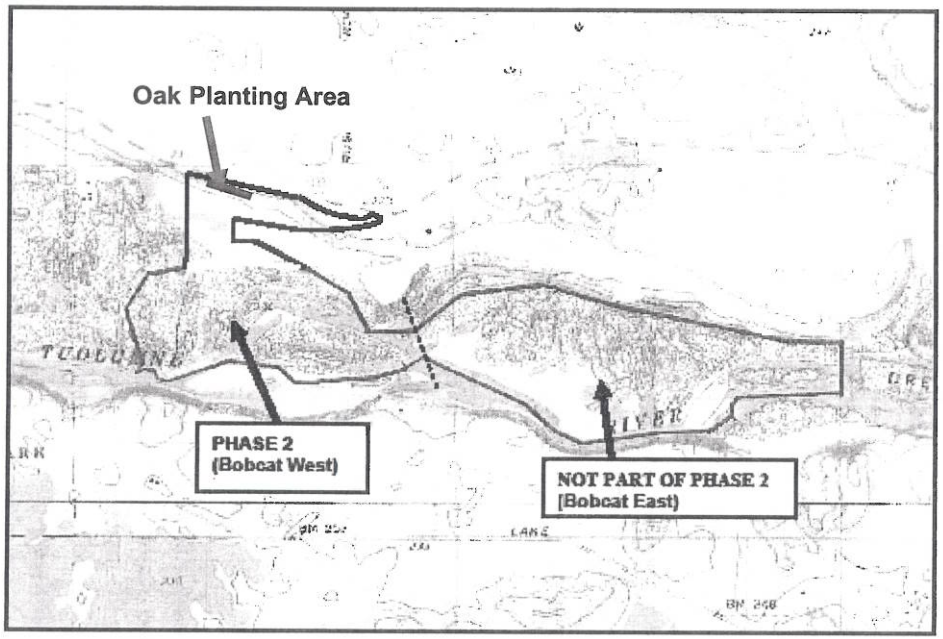
Trees:	Approximate Number
Arroyo Willow (*Salix lasiolepis*)	220
Goodings willow (*Salix gooddingii* var. *variabilis*)	220
Fremont Cottonwood (*Populus fremontii*)	220
Red Willow (*Salix laevigata*)	220
Yellow Tree Willow (*Salix lucida* var. *lasiandra*)	220
Valley oak (*Quercus lobata*)	18-40/a/

/a/ Valley oak replanting will be at a ratio of 3:1 for removed oak trees 3"-5" dbh and 5:1 for those oak trees removed that are more than 5" dbh.

Oak Tree Re-planting Area (See following figure)



Oak Planting Area



Where additional information is required for Phase II; the following revegetation list, from Phase I, may be used to enhance revegetation efforts:

Revegetation in conjunction with the proposed project (Bobcat West Phase) includes revegetation of the excavated areas only and does not include excavation

a. Approximately 2,000 native plants shall be planted to restore degraded areas on the project site, including 1,000 native trees, 300 native shrubs, and 700 native herbaceous plants shall be planted along the north side of the on-site reach of the Tuolumne River to improve habitat for both fish and wildlife. Trees shall be planted to conform to Central Valley Flood Protection Board (CVFPB) spacing requirements, 15 feet apart, and be aligned in rows, at least 20 feet apart, with rows placed in the direction of possible flood flows. Plants shall be placed in appropriate conditions for the individual species, in groupings to form plant communities. No planting shall be done in the high flow scour channel or its slopes.

b. Native species for revegetation shall include the following: arroyo willow, Gooding's willow, red willow, yellow tree willow, button-willow, Fremont's cottonwood, Oregon ash, Valley oak, white alder, California black walnut, bush lupine, cascara, coffee berry, coyote bush, mule fat, California wild rose, milkweed (*Asclepias* spp.), mugwort (turkey-foot sage), California (stinging) nettle, and Great Valley gum-weed.

c. Revegetated areas shall be mulched with materials, such as bark or wood chips, which promote water retention and reduce water loss from evaporation, to the maximum extent feasible.

d. Non-native weeds shall be kept trimmed by mechanical means within 50 feet along the revegetation areas.

e. The exterior fencing around the project site shall be maintained in good repair to prevent unauthorized motorized vehicles from disturbing the revegetation areas.

f. A goal for survival rate shall be established in consultation with the technical advisory committee for native trees and shrubs.

Restoration Objectives:

- Provide shaded riverine riparian habitat along the borders of the river
- Through diverse riparian plantings, improve habitat conditions for riparian bird species, especially by increasing the diversity of plant species and structure or riparian habitat
- Increase flower plant/insect pollinator diversity
- Enhance wetland and aquatic environments
- Selectively remove weeds and other invasive plants that interfere with hydraulic flow and use these as mitigation for the plantings of more valued native species that improve wildlife and overall habitat diversity
- Encourage the growth of native understory forbs and grasses including California blackberry, baccharis, creeping wild rye, sedges, mugwort and stinging nettle and discourage the growth of Himalayan blackberry
- Convert stands of sandbar willow to more diverse stands of cottonwood, ash and other native tree species

- Control Bermuda grass – competitive exclusion may be achieved with native sedges including *Carex barbarae* and rush (*Juncus effuses, J. balticus*);
- Encourage the addition of pollinators: milkweed, blazingstar (*Mentzelia* sp.), California poppy etc.

Planting Notes:

Plants to be installed as rooted container materials and cuttings. Materials used for restoration to be collected from the general vicinity of Bobcat Flat on the Tuolumne River (to the maximum extent feasible).

Cottonwood and willow forests can be restored by deep trenching suitable areas and then deep planting with long poles, then refilling with rock and top soil. Generous use of wood chip mulch can be applied to upper soil horizon and to surface to conserve moisture. These deep plantings will more readily tap into the water table than shallow plantings using rooted, container material. Cuttings using this technique may consist of poles up to 6-8 feet and 2-3 inches in diameter at butt end.

Rooted container materials raised from locally collected materials shall be grown at the nursery that specializes in native plant materials.

Recommended Patch Types:

Principal Species Common Name	Principal Species Scientific Name	Associated Species	Habitat Type
1. Valley oak	*Quercus lobata*	Mugwort, creeping wildrye	Riparian
2. Diverse Riparian	*Populus fremontii, Salix* spp.	Valley oak, ash, wild rose, mugwort, creeping wildrye	Riparian
3. Cottonwood	*Populus fremontii*	Creeping wildrye	Riparian, SRA
4.Ash	*Fraxinus latifolia*	Sedge, creeping wildrye	Riparian, SRA
5.Buttonbush	*Cephalanthus occidentalis*	Rush, mugwort	Riparian, pond
6.Wild rose	*Rosa californica*	Creeping wildrye	Riparian
7.Coyote bush	*Baccharis pilularis*	--	Shrub
8.Rush	*Juncus effuses; J. balticus*	--	Wetland, pond, SRA
9.Stinging nettles	*Urtica dioica*	--	Riparian
10.California cofeeberry	*Rhamnus californica*	--	Dry shrubland
11.Lupine, blazingstar	*Lupinus, Mentzelia*	--	Ruderal grassland, pollinator
12.Mugwort	*Artemisia douglasiana*	--	Riparian
13.Sedge	*Carex barbarae*	--	Riparian, SRA, pond
14.Creeping wildrye	*Leymus triticoides*	--	Riparian

SRA = Shaded Riparian Aquatic

Layout

The layout revegetation efforts will consist of elongated strips of cottonwoods and willows with associated clusters of circular patches. The stands of cottonwoods and willows will be planted in long trenches dug with a tractor or backhoe. Along these strips, circular patches of plantings will be installed.

Invasive weed control will use herbicidal sprays, mechanical removal, and overstory planting. Some invasives, such as water hyacinth, may be best removed with a combination of mechanical removal and herbicidal spraying. Other invasives such as starthistle, may best be eliminated by planting trees that will eventually provide shade under which starthistle does not thrive.

Phasing

Phase IA: Pilot plantings on scattered locations on west portion of property – Section A. Preference will be given to sites where temporary irrigation can be secured from ponds or the river. Include monitoring of site for individual species establishment success with least amount of input (in particular, irrigation).

Phase IB: Managed grazing at east end.

Phase IC: Contour certain areas providing shallow trenches. The purpose of this is to determine if native plants can reestablish themselves without planting and irrigation within a shallow

trench.

Phase IIA: Based on success of first year plantings, install more extensive plantings.

Phase IIB: Based on success of species response to grazing, adjust timing of livestock grazing on site.

STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. LL40
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

January 21, 2010

Amy Augustine
Augustine Planning Associates, Inc.
270 S. Barretta, Suite C
P.O. Box 3117
Sonora, CA 95370

Dear Ms. Augustine:

Bobcat Flat Restoration Phase II
State Clearinghouse (SCH) Number: 2005022101
Turlock Irrigation District and Friends of the Tuolumne
Mitigated Negative Declaration

Staff for the Central Valley Flood Protection Board has reviewed the subject document and provides the following comments:

The proposed project is located within the Tuolumne River and Duck Slough which are within the jurisdiction of the Central Valley Flood Protection Board (Formerly known as The Reclamation Board). The Board is required to enforce standards for the construction, maintenance and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways (Title 23 California Code of Regulations (CCR), Section 2).

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6);

- Existing structures that predate permitting or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6);

- Vegetation plantings will require the submission of detailed design drawings; identification of vegetation type; plant and tree names (i.e. common name and scientific name); total number of each type of plant and tree; planting spacing and irrigation method that will be within the project area; a complete vegetative management plan for maintenance to prevent the interference with flood control, levee maintenance, inspection and flood fight procedures (Title 23, California Code of Regulations CCR Section 131).

The permit application and Title 23 CCR can be found on the Central Valley Flood Protection Board's website at http://www.cvfpb.ca.gov/. Contact your local, federal and state agencies, as other permits may apply.

If you have any questions please contact me at (916) 574-0651 or by email jherota@water.ca.gov.

Sincerely,

James Herota

James Herota
Staff Environmental Scientist
Floodway Protection Section

Channel re-sizing and re-contouring is anticipated in conjunction with these activities as is partially filling remnant dredger channels and instream gravel pits to reduce predatory species habitat. Riparian habitat restoration on the constructed floodplain will occur through plantings (1,100± willow and cottonwood cuttings) and natural riparian vegetation recruitment as part of the overall master plan. The project monitoring plan includes the following anticipated activities: detailed topographical surveys, monitoring benthic macroinvertebrate composition using CA Stream Bioassessment Procedures (CDFG 1999), and weekly redd surveys at Phase I and II constructed riffles and using existing riffles as controls.

LOCATION: Along the northern shore and within the channel of the Tuolumne River in unincorporated eastern Stanislaus County, CA; approximately five river miles west of La Grange and 11-12 miles east of Waterford. The project site extends between River Miles 42.5± and 43.5±. T3S, R13E, Sections 32 and 33. Assessor's Parcels: 8-021-011, 8-021-26 and 8-020-023 (totaling 334± acres).

Subject to the nature and extent of comments received in response to this notice; a joint CEQA/NEPA document may be produced in the form of an addendum to the previously adopted 2005 Initial Study & Mitigated Negative Declaration prepared for the Phase I Project (SCH# 2005022101, Turlock Irrigation District and Friends of the Tuolumne).

COMMENTS (Bobcat Flat):

Agency Name: _____ Central Valley Flood Protection Board
3310 El Camino Ave., Rm. LL40
Name of Person Responding: ____ Sacramento, CA 95821
Attn: James Herota
Contact Information: _____

Please indicate below if you wish to be notified of public hearings or other notices provided in conjunction with this project. If you do not indicate your preference, we will assume you do not want notification or copies of the environmental documents.

Public Hearing Notification __X__ **Yes** ____ **No**

Other Notices __X__ **Yes** ____ **No**

Signed by: James Herota **Date:** 1-21-10

209.532.7376 · Fax 209.532.2652 · landplan@mlode.com
270 South Barretta, Suite C · Post Office Box 3117 · Sonora, California 95370

Stanislaus County
Striving to be the Best

CHIEF EXECUTIVE OFFICE
Richard W. Robinson
Chief Executive Officer

Patricia Hill Thomas
Chief Operations Officer/
Assistant Executive Officer

Monica Nino-Reid
Assistant Executive Officer

Stan Risen
Assistant Executive Officer

1010 10th Street, Suite 6800, Modesto, CA 95354
P.O. Box 3404, Modesto, CA 95353-3404
Phone: 209.525.6333 Fax 209.544.6226

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

January 28, 2010

Amy Augustine, AICP
Augustine Planning Associates, Inc.
PO Box 3117
Sonora CA 95370

SUBJECT: **ENVIRONMENTAL REFERRAL – CALIFORNIA DEPARTMENT OF FISH AND GAME – BOBCAT FLAT RESTORATION PHASE II – TUOLUMNE RIVER MILE 43 +/-**

Ms. Augustine:

The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has no comments at this time.

The following comment is submitted by the Department of Public Works (Senior Land Development Coordinator) dated January 25, 2010:

> Applicant stated that the cut and fill will balance on-site. There should not be any materials being hauled either into the site or off of the site.

The ERC appreciates the opportunity to comment on this project.

Sincerely,

Christine Almen

Christine Almen, Senior Management Consultant
Environmental Review Committee

cc: ERC Members

DEPARTMENT OF CONSERVATION

OFFICE OF MINE RECLAMATION

801 K STREET • MS 09-06 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 323-9198 • FAX 916 / 445-6066 • TDD 916 / 324-2555 • WEBSITE conservation.ca.gov

January 25, 2010

VIA EMAIL: landplan@mlode.com
ORIGINAL SENT BY MAIL

Amy Augustine, AICP
270 South Barretta, Suite C
P.O. Box 3117
Sonora, CA 95370

BOBCAT FLAT RESTORATION PHASE II

Dear Ms. Augustine,

The Department of Conservation's Office of Mine Reclamation (OMR) has received the Advisory Agency Notice of the preparation of an environmental document for the Bobcat Flat Restoration Phase II project. OMR would like to remind the applicant (Friends of the Tuolumne) and the lead agency (California Department of Fish and Game) that if more than 1000 cubic yards of material is proposed to be taken off the site for commercial purposes, the project must comply with the Surface Mining and Reclamation Act of 1976.

If you have any questions on these comments or require any assistance with other mine reclamation issues, please contact me at (916) 323-5435.

Sincerely,

James Pompy, Manager
Reclamation Unit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

January 25, 2010

Amy Augustine, AICP
270 S. Barretta, Suite C
P.O. Box 3117
Sonora, CA 95370

Project: Bobcat Flat Restoration Phase II – River 43

District CEQA Reference No: 20100044

Dear Ms. Augustine:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced. The District offers the following comments:

District Comments

1) The District's initial review of the project concludes that emissions resulting from construction and/or operation of the project may exceed the following thresholds of significance: 10 tons per year of oxides of nitrogen (NOx), 10 tons per year of reactive organic gases (ROG), or 15 tons per year particulate matter of 10 microns or less in size (PM10). The District recommends that a more detailed preliminary review of the project be conducted. The additional environmental review of the project's potential impact on air quality should consider the following:

   1a) Project Emissions should be identified and quantified.

      i) Permitted (stationary sources) and non-permitted (mobile sources) sources should be analyzed separately. Preparation of an Environmental Impact Report (EIR) is recommend should emissions from either source exceed the following amounts: 10 tons per year of oxides of nitrogen (NOx), 10 tons per year of reactive organic gases (ROG), or 15 tons per year particulate matter of 10 microns or less in size (PM10).

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

1b) Nuisance Odors should be discussed as to whether the project would create objectionable odors affecting a substantial number of people.

1c) Toxic Air Contaminants (TACs) – If the project is located near residential/ sensitive receptors, the proposed project should be evaluated to determine the health impact of TACs to the near-by receptors. If the analysis indicates that TACs are a concern, the District recommends that a Health Risk Assessment (HRA) be performed. If an HRA is to be performed, it is recommended that the project proponent contact the District to review the proposed modeling approach. Please contact Mr. Leland Villalvazo, Supervising Air Quality Specialist, at hramodeler@valleyair.org. Additional information on TACs can be found online by visiting the District's website at http://www.valleyair.org/ busind/pto/Tox_Resources/AirQualityMonitoring.htm

2) If preliminary review indicates that a Mitigated Negative Declaration should be prepared, in addition to the effects identified above, the document should include:

2a) Mitigation Measures – If preliminary review indicates that with mitigation, the project would have a less than significant adverse impact on air quality, the effectiveness of each mitigation measure incorporated into the project should be discussed.

2b) District's attainment status – The document should include a discussion of whether the project would result in a cumulatively considerable net increase of any criteria pollutant or precursor for which the San Joaquin Valley Air Basin is in non-attainment. Information on the District's attainment status can be found online by visiting the District's website at http://valleyair.org/aqinfo/ attainment.htm.

2c) Greenhouse Gases (GHGs) – At this time there are no established significance thresholds for greenhouse gas emissions; however, it is recommended that the environmental document include a discussion of greenhouse gas emissions generated by the project and the effect they will have, if any, on global climate change.

3) If preliminary review indicates that an Environmental Impact Report (EIR) should be prepared, in addition to the effects identified above, the document should also include the following:

3a) A discussion of the methodology, model assumptions, inputs and results used in characterizing the project's impact on air quality.

3b) A discussion of the components and phases of the project and the associated emission projections, (including ongoing emissions from each previous phase).

4) The proposed project may require District permits. Prior to the start of construction the project proponent should contact the District's Small Business Assistance Office at (559) 230-5888 to determine if an Authority to Construct (ATC) is required.

5) The proposed project may be subject to the following District rules: Regulation VIII (Fugitive PM10 Prohibitions), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants).

6) The District recommends that a copy of the District's comments be provided to the project proponent.

The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance Office at (559) 230-5888. Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call Debbie Johnson at (559) 230-5817.

Sincerely,

David Warner
Director of Permit Services

Debbie Johnson
for Arnaud Marjollet
Permit Services Manager

DW:dj

From: Cheryl Hudson [HudsonC@slc.ca.gov]
Sent: Tuesday, January 26, 2010 1:10 PM
To: landplan@mlode.com
Subject: Bobcat Flat Restoration Phase II - River Mile 43

Hi Amy,

The location of this project is in the jurisdiction of the State Lands Commission. The Friends of the Tuolumne, Inc. have been notified and an application has been sent. Should you have any questions, I can be reached at 916-574-0732.

Thank you,
Cheryl Hudson

In response to the Governor's Executive Order S-13-09, the Commission's offices will be closed the first three Fridays of each month beginning July 10, 2009 and ending June 30, 2010.

Cheryl L. Hudson
Public Land Management Specialist
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, California 95825
916-574-0732 (Office)
916-574-1835 (Fax)

Bobcat Flat Restoration Project, Phase 2

migrating salmonids during spring dam releases. Channel re-sizing and re-contouring is anticipated in conjunction with these activities as is partially filling remnant dredger channels and instream gravel pits to reduce predatory species habitat. Riparian habitat restoration on the constructed floodplain will occur through plantings (1,100± willow and cottonwood cuttings) and natural riparian vegetation recruitment as part of the overall master plan. The project monitoring plan includes the following anticipated activities: detailed topographical surveys, monitoring benthic macroinvertebrate composition using CA Stream Bioassessment Procedures (CDFG 1999), and weekly redd surveys at Phase I and II constructed riffles and using existing riffles as controls.

LOCATION: Along the northern shore and within the channel of the Tuolumne River in unincorporated eastern Stanislaus County, CA; approximately five river miles west of La Grange and 11-12 miles east of Waterford. The project site extends between River Miles 42.5± and 43.5±. T3S, R13E, Sections 32 and 33. Assessor's Parcels: 8-021-011, 8-021-26 and 8-020-023 (totaling 334± acres).

Subject to the nature and extent of comments received in response to this notice; a joint CEQA/NEPA document may be produced in the form of an addendum to the previously adopted 2005 Initial Study & Mitigated Negative Declaration prepared for the Phase I Project (SCH# 2005022101, Turlock Irrigation District and Friends of the Tuolumne).

COMMENTS (Bobcat Flat):

Name: CONSTANCE M. ARTHUR

Contact Information: cell: 209-985-3354

work/other 209 974 3401

Please indicate below if you wish to be notified of public hearings or other notices provided in conjunction with this project. If you do not indicate your preference, we will assume you do not want notification or copies of the environmental documents.

Public Hearing Notification ✓ **Yes** ___ **No**

Other Notices ✓ **Yes** ___ **No**

Signed by: [signature] **Date:** 1/14/10

All Seems OK.

209.532.7376 · Fax 209.532.2652 · landplan@mlode.com
270 South Barretta, Suite C · Post Office Box 3117 · Sonora, California 95370

Bobcat Flat

migrating salmonids during spring dam releases. Channel re-sizing and re-contouring is anticipated in conjunction with these activities as is partially filling remnant dredger channels and instream gravel pits to reduce predatory species habitat. Riparian habitat restoration on the constructed floodplain will occur through plantings (1,100± willow and cottonwood cuttings) and natural riparian vegetation recruitment as part of the overall master plan. The project monitoring plan includes the following anticipated activities: detailed topographical surveys, monitoring benthic macroinvertebrate composition using CA Stream Bioassessment Procedures (CDFG 1999), and weekly redd surveys at Phase I and II constructed riffles and using existing riffles as controls.

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COMMENTS (Bobcat Flat):

Name: JOEL HALL

Contact Information: _____

_____

Please indicate below if you wish to be notified of public hearings or other notices provided in conjunction with this project. If you do not indicate your preference, we will assume you do not want notification or copies of the environmental documents.

Public Hearing Notification X **Yes** ___ **No**

Other Notices X **Yes** ___ **No**

Signed by: W. Joel Hall **Date:** 1-21-010

I'm very interested in this restoration project. I would interested any info that might be important to the ENHANCEMENT OF The Wood Duck, River otter, Loggerhead Shrike, Chinook Salmon and Willow Flycatcher. (RAINBOW OR Steelhead Trout)

Joel

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APPENDIX F

Potentially Significant Adverse Impact/Effect	CALFED Mitigation Strategy	Applicable to Project?	Discussed in Initial Study?	Project Design Feature(s) Addressing Potential Impact (Numbers Correspond to Design Features in Appendix A)
Water Quality				
Release of inorganic and organic suspended solids into water column and turbidity resulting from increased erosion during construction, dredging, or drainage of flooded lands	7. Use best construction and drainage management practices to avoid transport of soils and sediments into waterway	Yes	Yes	5, 8, 12, 14, 16, 17, 18, 21, 26
	8. Use cofferdams to construct levees and channel modifications in isolation from existing waterways	Yes (sediment pond proposed)	Yes	21
	9. Use sediment curtains to contain turbidity plumes during dredging	No (no dredging proposed)	No	N/A
	19. Scheduling ground-disturbing construction during the dry season	Yes	Yes	1, 26
Geology & Soils				
Increased construction-related short-term soil erosion, and increased sediment deposition or soil compaction	4. Protect exposed soils with mulches, geotextiles, and vegetative ground covers to the extent possible during and after project construction activities in order to minimize soil loss	Yes	Yes	26, Appendix B, Project Description
	5. Implementing erosion control measures and bank stabilization projects where needed	Yes	Yes	26, Appendix B, Project Description
	6. Increasing sediment deposition and providing substrate for new habitat by planting terrestrial and aquatic species	Yes	Yes	26, Appendix B, Project Description
	8. Reusing dredged materials to reduce or replace soil loss	Yes (indirectly—project to re-use dredge material to replace gravel loss in-stream)	Yes	Project description, Appendix B
	14. Preparing and implementing a water quality and soils monitoring program	Yes	Yes	5, 8, 10, 12, 14, 16, 17, 18, 21, 26
	16. Preparing and implementing contingency plans for wetland and marshland restoration	Yes (floodplain recontouring	Yes	Project description; Appendix B

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		proposed)		
Noise				
Increased noise from heavy equipment operation during construction	1. Using electrically powered equipment instead of internal combustion equipment where feasible	Yes	Yes (indirectly)	8, 11, 12 (Authority to Construct Permit)
	4. Restricting the use of bells, whistles, alarms, and horns to safety warning purposes	Yes	Yes (indirectly)	8, 11, 12 (Authority to Construct Permit)
	5. Designing equipment to conform with local noise standards			8, 11, 12 (Authority to Construct)
	6. Locating equipment as far from sensitive receptors as possible	No	Yes (Project in rural area)	N/A
	7. Equipping all construction vehicles and equipment with appropriate mufflers and air inlet silencers	Yes	Yes (indirectly)	8, 11, 12 (Authority to Construct Permit)
	8. Restricting hours of construction to periods permitted by local ordinances	Yes	Yes	11
	9. Locating noisy equipment within suitable sound-absorbing enclosures	Yes	Yes (indirectly)	8, 11, 12 (Authority to Construct Permit)
	10. Erecting sound wall barriers or noise attenuation berms between noise generation sources and sensitive receptors	No	Yes (no sensitive receptors)	N/A
	11. Scheduling construction activities to avoid breeding seasons of sensitive species and peak recreation use	Yes	Yes	1, 2, 3, 4
Air Quality				
Direct, short-term air pollutant emissions during construction activities	1. Setting traffic limits on construction vehicles	Yes	Yes	23
	2. Maintaining properly tuned equipment	Yes	Yes	8, 12 (Authority to Construct Permit)
	3. Limiting the hours of operation or amount of equipment	Yes	Yes	11
	6. Regular, periodic water of construction sites to control levels of dust in the air	Yes	Yes	8, 12 (Dust Control Plan)
	7. Using soil stabilizers and dust	Yes	Yes	8, 12 (Dust Control Plan)

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	suppressants on unpaved service roadways			
	8. Daily contained sweeping of paved surfaces	No (No paved surfaces)	No	N/A
	9. Limiting vehicle idling time	Yes	Yes (indirectly)	8, 12 (Authority to Construct Permit)
	10. Using alternatively fueled equipment	No	No	8, 12 (Authority to Construct Permit)
	11. Requiring selection of borrow sites that are closest to fill locations	Yes	Yes (indirectly)	Project Description
	12. Implementing construction practices that reduce generation of particulate matter	Yes	Yes	8, 12 (Dust Control Plan)
	13. Hydroseeding and mulching exposed areas	Yes	Yes	26
Increased fugitive emissions of wind-blown dust	6,7,8,11,12,13 (see above)	See above	See above	See above
	14. Using cultivating practices that minimize soil disturbance	No (site not under cultivation)	No	N/A
Increased emissions associated with prescribed burning programs	5. Coordinating prescribed burning programs with relevant air quality management agencies to ensure that the programs are accounted for in state and federal air quality management plans	Yes	Yes	9
Aquatic and Fishery Resources				
Potential short-term disturbance of existing biological communities and species habitat, mobilized sediments, and input contaminants from construction activities.	1. Implementing BMPs, including stormwater pollution prevention plan, toxic materials control and spill response plan, and vegetation protection plan	Yes	Yes	5, 6, 7, 8, 10, 12, 16, 17, 18, 20, 22
	2. Limiting construction activities to windows of minimal species vulnerability	Yes	Yes	1
	10. Conducting core sampling and analysis of proposed dredge areas and engineering solutions to avoid or prevent environmental exposure of toxic substances after dredging.	No (No dredging proposed)	No	N/A
Vegetation and Wildlife Resources				
Temporary or permanent loss	1. Avoiding direct or indirect disturbance	Yes	Yes	1, 2, 3, 4, 5, 6,7, 8, 9, 12, 14, 15, 19, 20, 21,

Potentially Significant Adverse Impact/Effect	CALFED Mitigation Strategy	Applicable to Project?	Discussed in Initial Study?	Project Design Feature(s) Addressing Potential Impact (Numbers Correspond to Design Features in Appendix A)
or degradation of wetland and riparian communities	to wetland and riparian communities, special status species habitat, rare natural communities, significant natural areas, or other sensitive habitat			22, 23, 24, 25
	2. Designing program features to permit on-site or nearby restoration of wetlands, riparian habitat, special-status species habitat, rare natural communities, and significant natural areas that have been removed by permanent facilities	Yes	Yes	Project Description; Appendix B
	3. Restoring or enhancing in-kind wetland and riparian habitat or rare natural communities and significant natural areas at off-site locations before, or at the time that, project impacts are incurred.	Yes	Yes	Project Description; Appendix B
	4. Restoring wetland and riparian communities, special-status species habitat, and wildlife use areas temporarily disturbed by on-site construction activities immediately following construction.	Yes	Yes	Project Description; Appendix B
	5. Phasing the implementation of Ecosystem Restoration Program habitat restoration to offset temporary habitat losses and to restore habitat (including special-status species habitat) before, or at the same time that, project impacts associated with the Ecosystem Restoration Program are incurred	Yes	Yes	Project Description, Appendix B
	13. Maintaining sufficient outflow downstream of constructed off-stream reservoirs to maintain existing downstream wetland riparian communities	No	No	N/A
	14. Managing recreation-related activities on lands managed under the Program to reduce or avoid impacts on sensitive habitat, important wildlife use areas, and	No (new recreational activities not	Yes (addressing existing fishing use)	N/A

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	special-status species	proposed)		
	15. Avoiding creation of wetlands in areas with high concentrations of mercury in sediments	No	No	N/A
Temporary or permanent loss of habitat or direct impacts on special status species	1, 2, 3, 4, 5, 14, 15 (see above)	See above	See above	See above
	9. Avoid construction or maintenance activities within or near habitat areas occupied by special-status wildlife species or in important wildlife use areas when species may be sensitive to disturbance	Yes	Yes	1, 2, 3, 4
	10. Establishing additional populations of special-status species in protected suitable habitat elsewhere within their historical range for species for which relocation or artificial propagation is feasible.	No (need for species relocation not anticipated)	No	N/A
	11. Altering agricultural practices to improve habitat conditions for affected special status species that use agricultural lands. This could include planting and managing crops to increase the availability or quantity of forage for affected species.	Indirect	Indirect (managed grazing)	Appendix B, Project Description
Temporary disturbance or mortality of special-status species due to construction and habitat management activities	1,4,14 (See above)	See above	See above	See above
	12. Implementing Best Management Practices	Yes	Yes	1, 2, 3, 4, 5, 6, 7, 22, 23, 24, 25
Cultural Resources				
Impacts on cultural resources from ground-disturbing activities	1. Conducting cultural resource inventories	Yes	Yes	None required
	2. Avoiding sites through project design	No (no sites identified)	Yes	N/A
	3. Mapping sites	No (no sites identified)	Yes	N/A
	4. Conducting surface collections	No (no resources	Yes	N/A

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		identified for collection)		
	5. Performing test excavations	No (none required)	No	N/A
	6. Probing for potentially buried sites	Yes (none identified or anticipated)	Yes	13
	7. Preparing reports to document mitigation work	No (none anticipated)	Yes	N/A
	8. Conducting full-scale excavations of sites slated for destruction as a result of projects	No (none identified)	Yes	
	9. Preparing public interpretive documents	No (no resources for interpretation)	No	N/A
	11. Conducting ethnographic studies for traditional cultural properties	No (no such properties identified)	Yes	N/A